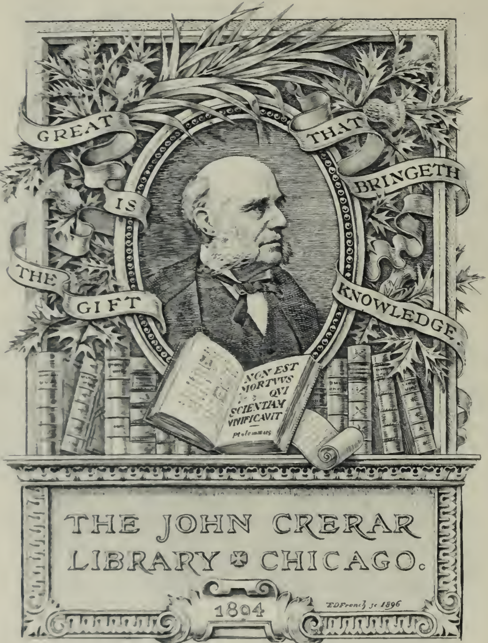
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Manhattan College
Catalogue

SIGNUM FIDEI

1913-1914

Catalogue
of
Manhattan College
and
Manhattan College High School

NEW YORK

CONDUCTED BY
The BROTHERS of the CHRISTIAN SCHOOLS

1913-1914

470

THE
JOHN CRERAR
LIBRARY

OFFICERS OF THE COLLEGE.

BROTHER GERARDUS
Chairman of Board of Trustees

BROTHER EDWARD
President

BROTHER AUGUST
Registrar

BROTHER POTAMIAN
Secretary

BROTHER ANGELUS
Treasurer

General Calendar

1913

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
JAN.	..	..	..	1	2	3	4
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1914

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COLLEGE CALENDAR.

1913.

Sept. 2-6,	Tuesday-Saturday,	Registration.
Sept. 8-9,	Monday-Tuesday,	Condition and Entrance Examinations.
Sept. 10.	Wednesday,	Class Exercises begin.
Oct. 13-15,	Monday-Wednesday,	Annual retreat.
Nov. 1,	Saturday,	All Saints' Day, Holiday.
Nov. 4,	Tuesday,	Election Day.
Nov. 12,	Wednesday,	Quarterly Examinations, High School.
Nov. 27,	Thursday,	Thanksgiving Day.
Dec. 8,	Monday,	Immaculate Conception, Holiday.
Dec. 20,	Saturday,	Christmas recess begins, 12 M.

1914.

Jan. 5,	Monday,	Class Exercises resumed, 9 A. M.
Jan. 26,	Monday,	Examinations.
Jan. 29-30,	Friday-Saturday,	Entrance Examinations.
Feb. 2,	Monday,	Second Term begins.
Feb. 12,	Thursday,	Lincoln Day.
Feb. 22,	Sunday,	High School contest in elocution.
Mar. 29,	Sunday,	Contest for the Grady Medal.
Apr. 7,	Tuesday,	Easter recess begins, 2:30 P. M.
Apr. 15,	Wednesday,	Class Exercises resumed, 9 A. M.
Apr. 20,	Monday,	Quarterly Examinations, High School.
May 15,	Friday,	Feast of St. De La Salle.
May 21,	Thursday,	Ascension Day, Holiday.
May 30,	Saturday,	Decoration Day, Services for deceased alumni.
June 6,	Saturday,	Examinations.
June 14,	Sunday,	Baccalaureate sermon.
June 16,	Tuesday,	Commencement Exercises, General Meeting of the alumni societies.

HISTORY AND ORGANIZATION.

THE institution now known as Manhattan College was opened in 1849 as an academy for young men who desired advanced instruction. From its original location in Canal Street, it was transferred in 1853 to its present site, where it was known as the Academy of the Holy Infancy. In 1863, it was incorporated by the Regents of the University of the State of New York under its present title, and empowered to confer the usual academic degrees.

The College offers two departments of study, the Department of Arts and the Department of Civil Engineering. The courses in the former lead to the degrees of Bachelor of Arts and Master of Arts; in the latter, to the degrees of Bachelor of Science in Civil Engineering and Civil Engineer. The requirements for admission into both departments and the respective courses of study will be found on pages 8 and 17.

As the vernacular language and literature constitute an essential feature of a sound education, special attention is given in both departments to the study of English. The importance of the natural and experimental sciences is emphasized in the courses given in biology, physics, chemistry, and geology. These courses are of special benefit to students preparing for medical school. Of no less advantage for the prospective law student are the courses in logic and political and social science. For students who intend to embrace the teaching profession, there are offered courses in pedagogy and in the history and psychology of education.

Besides the College proper, there is a High School department. This department offers two courses—a modern language course and a business course. The former, which corresponds to the ordinary four-year high school course, prepares directly for college entrance; the latter, which offers two years of commercial work, may be elected after the completion of two years' work in a regular high school course.

In both the Collegiate and High School departments, every attention is bestowed on the moral and religious training of the student. Christian doctrine is taught in all the classes. Regular attention to religious duties is required of all students. Though the College is Catholic in its tone and teaching, non-Catholic students are received.

The Library contains nearly 11,000 volumes, and additions are regularly made to keep the general reference section abreast of modern development. In the College Reading Room, the best current periodicals are kept on file.

The College Museums offer adequate facilities for research work in zoology, botany, geology and mineralogy.

EXPENSES.

Resident Students	$350 00
Day Students, College	100 00
Day Students, High School	75 00
Luncheon at College	60 00
Use of laboratory and apparatus for any one course	10 00
Use of typewriter	10 00
Use of library	2 00
Music: piano, $80; mandolin, $50; violin, $50	
Graduation	10 00
Certificate	5 00
Condition examinations per subject	2 00
Athletics (collected by the College for the Athletic Association)	5 00

For books and stationery, cash payment is required.

Payment for the half session of five months is required in advance.

Remittances from outside New York City are to be made by draft or by post-office order payable at Station J.

REQUIREMENTS FOR ADMISSION.

The requirements for admission conform to the standards prescribed by the Regents of the University of the State of New York.

1. **English.**— The requirement in English is that recommended by the National Conference on Uniform Entrance Requirements in English.

REQUIREMENT FOR 1913, 1914, AND 1915

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence and appreciation.

ENGLISH GRAMMAR AND COMPOSITION

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, paragraphs, and the different kinds of whole composition, including letter-writing, should be thoroughly mastered; and practice in composition oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise narration, description and easy exposition and argument based upon simple outlines. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted effort of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

LITERATURE

The second object is sought by means of two lists of books, headed respectively *Reading* and *Study,* from which may be framed a progressive course in literature covering four years.

In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

A, READING

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature, by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

The books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group 1.

Group 1

The *Old Testament,* comprising at least the chief narrative episodes in Genesis, Exodus, Josue, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther.

The *Odyssey,* with the omission, if desired, of Books 1, 2, 3, 4, 5, 15, 16, 17.

The *Iliad,* with the omission, if desired, of Books 11, 13, 14, 15, 17, 21.

The *Aeneid.*

The *Odyssey, Iliad* and *Aeneid* should be read in English translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group 2

Shakespeare's *The Merchant of Venice; Midsummer Night's Dream; As You Like It; Twelfth Night; Henry the Fifth; Julius Caesar.*

Group 3

Defoe's *Robinson Crusoe, Part I;* Goldsmith's *The Vicar of Wakefield;* either Scott's *Ivanhoe,* or Scott's *Quentin Durward;* Hawthorne's *The House of the Seven Gables;* either Dickens' *David Copperfield,* or Dickens' *A Tale of Two Cities;* Thackeray's *Henry Esmond;* Mrs. Gaskell's *Cranford;* George Eliot's *Silas Marner;* Stevenson's *Treasure Island.*

Group 4

Bunyan's *Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers* in the Spectator; Franklin's *Autobiography* (condensed); Irving's *Sketch Book;* Macaulay's *Essays on Lord Clive* and *Warren Hastings;* Thackeray's *English Humourists;* Selections from Lincoln, including at least two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman's *Oregon Trail;* either Thoreau's *Walden,* or Huxley's *Autobiography* and selections from *Lay Sermons,* including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; Stevenson's *Inland Voyage* and *Travels with a Donkey.*

Group 5

Palgrave's *Golden Treasury* (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns; Gray's *Elegy in a Country Churchyard* and Goldsmith's *The Deserted Village;* Coleridge's *Ancient Mariner* and Lowell's *Vision of Sir Launfal;* Scott's *The Lady of the Lake;* Byron's *Childe Harold,* Canto IV, and *Prisoner of Chillon;* Palgrave's *Golden Treasury (First Series), Book IV,* with especial attention to Wordsworth, Keats and Shelley; Poe's *Raven,* Longfellow's *Courtship of Miles Standish,* and Whittier's *Snow Bound;* Macaulay's *Lays of Ancient Rome* and Arnold's *Sohrab and Rustum;* Tennyson's *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Browning's *Cavalier Tunes, The Lost Leader, How They Brought the Good News from Ghent to Aix, Home Thoughts from Abroad, Home Thoughts from the Sea, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa—Down in the City.*

B, STUDY

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. The books provided for study are:

Shakespeare, *Macbeth;* Milton, *L'Allegro, Il Penseroso,* and *Comus;* Burke, *Speech on Conciliation with America* or Washington, *Farewell Address,* and Webster, *First Bunker Hill Oration;* Carlyle, *Essay on Burns* or Macaulay, *Life of Johnson.*

EXAMINATION

However accurate in subject matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling or other essentials of good usage.

The examination will be divided into two parts, one of which may be taken as a preliminary, and the other as a final.

The first part of the examination will be upon ten units chosen, in accordance with the plan described earlier, from the lists headed *Reading;* and it may include also questions upon grammar and the simpler principles of rhetoric, and a short composition upon some topic drawn from the student's general knowledge or experience. On the books prescribed for reading, the form of the examination will usually be the writing of short paragraphs on several topics which the candidate may choose out of a considerable number. These topics will involve such knowledge and appreciation of plot, character-development and other qualities of style and treatment as may be fairly expected of boys and girls. In grammar and rhetoric, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors.

The second part of the examination will include composition and those books comprised in the list headed *Study.* The test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books prescribed for study, from the candidate's other studies and from his personal knowledge and experiences quite apart from reading. For this purpose the examiner will provide several subjects, perhaps five or six, from which the candidate may make his own selections. The test on the books prescribed for study will consist of questions upon their content, form and structure and upon the meaning of such words, phrases and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works and the periods of literary history to which they belong.

2. **History.**—(a) Ancient History, and events down to 814 A.D.; (b) English History, or Mediaeval and Modern History; (c) American History and Civics.

3. **Algebra.**—Wentworth, *Elementary Algebra,* or equivalent.

4. **Geometry.**—Wentworth, *Plane and Solid Geometry,* or equivalent.

5. **Plane Trigonometry.**—Wentworth, *Plane Trigonometry,* or equivalent.

6. **French.**—Grammar, sight translation, and composition based upon the following books:

De Maistre, *Voyage autour de ma Chambre;* Mairet, *La Tâche du petit Pierre;* Halévy, *L'Abbé Constantin;* Daudet, *Le Siége de Berlin,* and Merimée, *Colomba.*

7. **German.**—Grammar, sight translation and composition based upon the following books:

Hillern, *Höher als die Kirche;* Hauff, *Das Kalte Herz;* Freytag, *Die Journalisten;* Storm, *Immensee;* Benedix, *Der Prozess.*

8. **Chemistry.**—A course of at least sixty experiments made by the candidate, with note-book certified by the teacher.

9. **Physics.**—Knowledge of the general principles of physics, and their applications. Each candidate must present a note-book containing a description of at least forty experiments which he has performed.

The following will be accepted in place of French and German:

Latin.—Grammar, Allen & Greenough, or equivalent, including prosody. Cæsar, *Gallic War,* Books I-IV. Cicero, six orations. Reading at sight of a short passage of easy Latin prose. Virgil, *Æneid,* Books I-VI. Latin prose composition.

Greek.—Grammar, Goodwin, or equivalent, including prosody. Xenophon, *Anabasis,* Books I-III. Homer, *Iliad,* Books I-III. Greek prose composition.

Students presenting Latin and Greek for admission will be required to take a special course in French and German during the Freshman year, and will thereafter follow the regular program.

A certificate of the Regents of the University of the State of New York, or of approved schools, will be received in lieu of the entrance examination, provided it has been issued within the year. The candidate will, however, be examined on such branches as are not included in this certificate.

Candidates for admission must present a certificate of good character.

GENERAL REGULATIONS.

Examinations.—Examinations for admission are held at the College on the two days preceding the opening of each term.

The regular College term examinations are held during the last week of January and the second week of June.

In case of illness or for some other equally grave cause, a student may have his examination postponed.

Students absent for more than ten per cent. of the recitations in any subject will not be allowed to take the examination in that subject. Students absent on the two days following the Thanksgiving, Christmas, or Summer recesses, without permission, will be charged with two absences for each recitation missed.

For students who fail in the regular examinations, condition examinations are held at the College on the two days preceding the opening of the first term, and also on the first day of the Christmas and Easter recesses. Students are required to pay two dollars for an examination in each subject in which they are conditioned.

Rating.—The final standing of each student in any subject is determined by his examination results and his class-marks in that subject. Seventy per cent. constitutes a pass in each subject. A statement of the numerical standing of the student in each subject is sent to the parent or guardian at the close of each term.

Promotion.—No student will be allowed to take up Freshman work whose conditions on entrance exceed one and one-half units.* All entrance conditions must be removed before the beginning of Sophomore year.

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*A unit is five recitations a week for one year in any subject. Two hours of laboratory work or two hours of drawing are equivalent to one hour's recitation.

No student will be allowed to take up Sophomore work whose failures in Freshman work exceed one and one-half units. No student will be allowed to take up Junior work whose failures exceed one unit in the work of the two previous years. No student will be allowed to take up Senior work who has any conditions.

Studies.—The studies of the course in civil engineering are prescribed throughout. In the Arts course, Freshman and Sophomore work is prescribed, and electives are offered in the Junior and Senior years. No elective course will be given unless there is a sufficient number of applicants.

Degrees.—Every candidate for a degree is required to present a typewritten thesis on a subject connected with his course. The subject selected must be submitted for approval to the Professor of the department to which it belongs, on or before February 1. Such help and guidance may be offered the candidate as the Professor may judge right, and the completed thesis shall be handed in for approval on or before May 30.

Theses shall contain not less than two thousand words, and must be typewritten on paper 13x8, with a margin of an inch and one-half. Science theses must be accompanied by the necessary drawings and illustrations. All approved theses become the property of the College and are placed in charge of the Librarian.

If a student fail to present his thesis, or if the thesis be rejected, he shall not be recommended for his degree.

At the discretion of the Faculty, a certificate of proficiency may be given to a student who has followed, under the direction of the Faculty, a special course of one or more subjects, and who gives evidence of satisfactory proficiency.

Honors.—Students who attain an average of ninety per cent. in all the subjects of their College course, will be graduated with *Honor*. They will be graduated with *Credit* if they attain an average of from eighty-five to ninety per cent. in all the subjects of their College course.

COURSE OF STUDY.

ARTS DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM.			SECOND TERM.		
English	(5)	52, 57	English	(5)	52, 57
Public Speaking	(1)	116	Public Speaking	(1)	116
French	(4)	63	French	(4)	63
German	(4)	69	German	(4)	69
History	(3)	74	History	(3)	75
Mathematics	(3)	90	Mathematics	(3)	89
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Religion	(2)	121	Religion	(2)	121

SOPHOMORE CLASS.

FIRST TERM.			SECOND TERM.		
English	(5)	53, 58	English	(5)	53, 59
Public Speaking	(1)	117	Public Speaking	(1)	117
French	(4)	64	French	(4)	64
German	(4)	70	German	(4)	70
History	(3)	76	History	(3)	77
Chemistry	(1)	13	Chemistry	(1)	13
Chemical Laboratory	(3)	14	Chemical Laboratory	(3)	14
Religion	(2)	122	Religion	(2)	122

The figures in parentheses indicate the number of hours a week; the others indicate the paragraphs in which the course is outlined.

JUNIOR CLASS.

FIRST TERM.			SECOND TERM.		
English	(5)	54, 60	English	(5)	55, 61
Public Speaking	(1)	118	Public Speaking	(1)	118
French	(3)	65	French	(3)	65
German	(3)	71	German	(3)	71
Philosophy	(4)	101, 103	Philosophy	(4)	102
Geology	(4)	67	Astronomy	(4)	1, 2
Economics	(2)	47	Economics	(2)	47
Religion	(2)	123	Religion	(2)	123

ELECTIVES.

FIRST TERM.			SECOND TERM.		
Pedagogy	(3)	97, 99	Pedagogy	(3)	97, 99
Biology	(4)	3	Biology	(4)	4
Spanish	(3)	124	Spanish	(3)	124
Italian	(3)	87	Italian	(3)	87
American Political Institutions	(1)	81	European Constitutions	(1)	82
Church History	(1)	86	Church History	(1)	86

SENIOR CLASS.

FIRST TERM.			SECOND TERM.		
English	(4)	56, 62	English	(4)	56, 62
Public Speaking	(1)	119	Public Speaking	(1)	119
French	(2)	66	French	(2)	66
German	(2)	72	German	(2)	72
History of Philosophy	(2)	113	History of Philosophy	(2)	113
Ontology and Cosmic Philosophy	(4)	104, 105	Epistomology	(2)	108
Philosophy of History	(2)	85	Philosophy of History	(2)	85
Natural Theology	(2)	109	Psychology	(4)	106, 112
			Ethics	(2)	110, 111

ELECTIVES.

FIRST TERM.			SECOND TERM.		
Pedagogy	(3)	98, 100	Pedagogy	(3)	98, 100
Biology	(2)	5	Psychology of Education	(1)	107
Spanish	(2)	125	Biology	(2)	6
Italian	(2)	88	Spanish	(2)	125
Principles of Government	(3)	48	Italian	(2)	88
Public Finance	(2)	49	Sociology	(3)	51
American History	(2)	83	Representative Government	(2)	50
History of the 19th Century	(1)	80	American History	(2)	84
			History of the 19th Century	(1)	80

COURSE OF STUDY.

CIVIL ENGINEERING DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM.			SECOND TERM.		
English,	(2)	52	English	(2)	52
Public Speaking	(1)	116	Public Speaking	(1)	116
Mathematics	(6)	90, 91	Mathematics	(6)	89, 91
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Surveying	(3)	16	Surveying	(3)	16
Descriptive Geometry	(2)	42	Descriptive Geometry	(2)	42
Drawing	(4)	39, 40	Drawing	(4)	39, 40
Religion	(2)	121	Religion	(2)	121

Summer Field Work, Three Weeks, 35

SOPHOMORE CLASS.

FIRST TERM.			SECOND TERM.		
English	(2)	53	English	(2)	53
Public Speaking	(1)	117	Public Speaking	(1)	117
Mathematics	(3)	93	Mathematics	(3)	93
Mechanics	(3)	94	Mechanics	(3)	94
Chemistry	(1)	13	Chemistry	(1)	13
Chemical Laboratory	(3)	14	Chemical Laboratory	(3)	14
Drawing	(6)	41, 43	Surveying	(2)	17
Surveying	(3)	17	Graphic Statics	(2)	44
Religion	(2)	122	Drawing	(4)	41, 43
			Religion	(2)	122

Summer Field Work, Three Weeks, 36

JUNIOR CLASS.

FIRST TERM.		
English	(2)	54
Public Speaking	(1)	118
Materials of Construction	(4)	23, 38
Mechanics of Materials	(3)	95
Road and Railroad Engineering	(2)	18, 22
Drawing	(4)	45
Analytical Mechanics	(2)	96
Geology	(4)	67
Religion	(2)	123
Field Work		37

SECOND TERM.		
Public Speaking	(1)	118
Masonry Construction	(3)	20, 24
Trusses	(3)	28
Road and Railroad Engineering	(2)	18, 30
Tunneling	(2)	25
Excavations	(2)	26
Drawing	(4)	45
Metallurgy	(2)	15
Astronomy	(4)	1, 2
Religion	(2)	123
Field Work		37

SENIOR CLASS.

FIRST TERM.		
Public Speaking	(1)	119
Bridges	(6)	29
Hydraulics	(2)	23
Sewers	(2)	27
Cement Laboratory	(4)	24
Design Problems	(6)	46
Economics	(2)	47
Natural Theology	(2)	109

SECOND TERM.		
Public Speaking	(1)	119
Bridges	(6)	29
Contracts and Specifications	(2)	32
Road and Railroad Engineering	(3)	30
Water Supply	(2)	31
Design Problems	(3)	46
Economics	(2)	47
Ethics	(2)	110, 111
Thesis	(4)	

PEDAGOGY.

The regular College work in logic and psychology satisfies the requirements of both State and City Superintendents of Public Instruction, under whose immediate direction examinations in the history of education and in method are held. Upon completing a satisfactory examination in these subjects, the candidate receives a license to teach for three years, after which period, if successful experience can be demonstrated, the provisional license may be exchanged for a life certificate.

The main requisite is that the candidate be a graduate from a college or university recognized by the Regents of the University of the State of New York, wherein at least one year was spent in pedagogical study amounting to not less than 210 hours, with attendance upon lectures or recitations, as follows: logic or psychology, at least 90 hours; history and principles of education and methods of teaching, at least 120 hours.

The courses offered to the students in Pedagogy are:

JUNIOR YEAR.—Logic, 60 hours.
History of Education and
Principles of education, 90 hours.

SENIOR YEAR.—Psychology, 90 hours.
Method in teaching, 60 hours.
Observation, 20 hours.

HIGHER DEGREES.

Bachelors of Arts may obtain the Master's degree by pursuing an approved course of study and giving satisfactory evidence of scholarship. If such post-graduate study is not pursued in the College, the degree will not be conferred until two years after graduation.

Professional study, as such, does not entitle one to the Master's degree; but original research or special and scholarly study connected with a profession may, at the discretion of the Faculty, be accepted.

Essays, theses, and dissertations intended for the Master's degree must be presented at least one month before the end of the academic year and must contain, at least, 3,000 words. The bibliography or list of works consulted must, in each case, be appended to the thesis.

If a candidate's thesis is approved, he will be informed as to the time when he will be required to meet the Board of Examiners for any further test of his qualifications which may be deemed necessary.

Bachelors of Science in Engineering may obtain the degree of Civil Engineer one year after graduation on the presentation of an approved thesis.

COURSES OF STUDY

FOR THE MASTER'S DEGREE.

Master of Arts.

Any one of the following courses:

1. Moral Philosophy, with written thesis, making special application of its principles to mooted questions of the day.
2. Plato or Aristotle, with the history of his influence on modern thought.
3. A comparative study of the psychology of St. Thomas Aquinas and modern psychology.
4. A comparative study of Thomistic ethical principles and current theories.
5. A critical study of Locke's influence on modern philosophy.
6. A critical study of Kantianism.
7. A critical study, with practical applications, of any *one* of the following psychologic principles as applied in teaching:

   (*a*) Interest; (*b*) Apperception; (*c*) Attention; (*d*) Personal Equation; (*e*) Imitation; (*f*) Free Will; (*g*) Character; (*h*) Humor; (*i*) Imagination.
8. A critical examination of current errors in logic, psychology, or ethics.
9. A thorough criticism of any one of the accepted texts in logic, psychology, or ethics.
10. A critical examination of any one of the accepted texts in the history of education.
11. A critical study of the growth of the novel.

12. English literature. Critical analysis of any classic author from the Catholic standpoint.
13. French literature, with translations at sight from any classic author, and a critical French essay on his work or his age.
14. German literature, with translations at sight from any classic author, and a critical German essay on his work or his age.
15. Church History. Selections of important periods for research, with essays embodying results of investigation.
16. A discussion of current theories in political economy.
17. A critical examination of any one of the texts commonly accepted as standard in political economy.
18. A detailed examination with applications of the relations of political economy to ethics.
19. A critical study of Leo XIII.'s encyclicals on political, social and economic questions.
20. Discussion of prevalent sociological theories.
21. Amplification of topics discussed by the Catholic Truth Society.

Master of Science.

Any one of the following courses:

1. Higher co-ordinate geometry of two dimensions; co-ordinate geometry of three dimensions.
2. General theory of equations.
3. Higher parts of the integral calculus; differential equations; calculus of variations.
4. Rigid dynamics.

5. Fourier's theorem and its applications.
6. The wave theory treated mathematically or experimentally, or both.
7. The electromagnetic theory of light.
8. Phenomena of interference, diffraction and polarization.
9. Spectrum analysis.
10. The electronic theory of matter.
11. Conservation and dissipation of energy.
12. Application of the doctrine of energy to the phenomena of chemical combination.
13. Thermal measurement of energy.
14. Properties and phenomena of the ether.
15. Discharge of electricity through gases.
16. Recent views on electricity.
17. Higher parts of static and dynamic electricity.
18. Phenomena of alternating currents.
19. Astrophysics.
20. Special studies in civil engineering.
21. Special studies in electrical engineering.

These subjects are merely suggestive, and are intended to assist the candidate in the choice of a subject for his thesis. The treatment of the subject should be thorough and comprehensive, and should embody the result of original thought or of experimental investigation, as the case may require.

Published works of the candidate on the subject selected, articles in reviews or scientific periodicals, or contributions to the transactions of learned societies will receive due consideration from the Board of Examiners.

DEPARTMENTS OF INSTRUCTION.

ASTRONOMY.

1. **Descriptive Astronomy.**—The dimensions of the earth, its mass and motions. Phenomena depending on the axial and the orbital motion of the earth. Determination of the figure and magnitude of the earth. Kepler's laws and applications. Phenomena depending on change of place. Fundamental principles of celestial mechanics. Dimensions and configuration of the solar system. The sun and planets. Tides, eclipses, transits.

Young, *Manual of Astronomy.*

2. **Practical Astronomy.**—Construction, adjustment and use of the sextant, transit, spectroscope and equatorial telescope. Determination of the meridian, latitude, and local time.

BIOLOGY.

3. **Natural History of Plant Groups.**—Structure of plants and function of the various organs. Study of phanerogams and cryptogams. Histology and physiology of plants.

4. **Zoology.**—Structure of leading types of animals; function of organs; classification; economic relations; geographical distribution. Lectures, recitations, laboratory work, visits to museums.

5. **Human Anatomy and Physiology.**—Lectures, illustrated with charts, models, and lantern slides.

6. **The Nervous System and Its Terminal Organs.**—Lectures and illustrations, with charts, models and lantern slides.

CHEMISTRY.

13. **Qualitative Analysis.**—Description of a method of separation which experience has proved to be sufficiently simple and accurate.

Noyes, *Qualitative Analysis.*

14. **Laboratory Work.**—Separation of the ordinary bases and acids.

Noyes, *Qualitative Analysis.*

15. **Metallurgy of Iron and Steel.**—Study of the physical and chemical properties as well as the constitution and manufacture of cast iron, wrought iron, and steel.

Stoughton, *The Metallurgy of Iron and Steel.*

CIVIL ENGINEERING.

16. **Land Surveying.**—Theory and general principles. Adjustment and use of instruments. Leveling. Making of profile; grading. Chain and compass surveying. Balancing, plotting, supplying omissions, and computing areas.

Tracy, *Plane Surveying.*

17. **Land Surveying.**—Topographical surveying by transit and stadia. Leveling, contour lines, plotting. Triangulation. Use of plane table, planimeter and sextant. Theory of simple curves, slope staking. City, hydrographic and mining surveying.

Breed & Hosmer, *Principles and Practice of Surveying.*

18. **Road Engineering.**—Location and grading of country roads. Draining and protection works. Maintenance. Foundation. City streets. Pavements: stone,

wood, asphalt, brick. Tools and machinery employed in road construction. Specifications and contracts regarding roads.

Byrne, *Highway Construction.*

20. **Foundations.**—Construction of timber foundation. Cofferdams of timber. Open and pneumatic caissons. Trestle foundation. Piles in foundations. Economical considerations in foundations. Estimates of cost. Methods for deep foundations.

Baker, *Foundations.*

Prelini, *Earth Slopes, Retaining Walls and Dams.*

21. **Timber Structures.**—Culverts. Pile bents. Frame bents. Bracing compound timber structures. Trestles on curves. Floor details. Connection with embankment, derailing devices, field engineering, and erection of trestle, design and estimates for a completed trestle.

Foster, *Treatise on Modern Trestle Bridges.*

22. **Railroad Surveying.**—Reconnaissance and preliminary surveys. Simple compound, parabolic and spiral curves. Turnouts and crossings. Computation of earth work. Railroad economics.

Searle, *Field Engineering.*

23. **Masonry Structures.**—Theory of the slope of earth embankments; graphical and analytical methods for determining earth-pressure as well as the thickness of retaining-walls and dams. Arches. Masonry culverts and bridges.

Baker, *Masonry Construction.*

24. **Cement and Concrete.**—Portland and natural cement: raw materials, methods of manufacture, uses. Laboratory work in testing.

Concrete plain and reinforced. Selection of materials, proportions, methods of mixing and depositing; cost.

Specifications for cement and steel designs. Theory of reinforced beams, floors, slabs, columns and arches. Design of reinforced retaining walls, dams, culverts, pipes and bridges.

Taylor and Thompson, *Concrete, Plain and Reinforced.*

25. **Tunneling.**—Timbering and lining of tunnels. Excavation of tunnels through rock, and through loose and treacherous soils. Subaqueous tunnels. Open cut. Subways. Ventilation of tunnels.

Prelini, *Tunneling.*

26. **Excavations.**—Earthwork, excavations by hand and machine, rock excavation, hauling on horizontal and inclined roads, hoisting cableways, trench cutting, embankment constructions, dredging and dredging materials.

Prelini, *Earth and Rock Excavation.*

Prelini, *Dredges and Dredging.*

27. **Sewers and Sewage Disposal.**—Dimensions and materials used, location, precautions in construction, study of examples, estimate of cost, surface drainage in towns and cities, separate and combined systems, capacities of main and branches, grade, flow and discharge of sewers. Methods of sewage disposal, discharge into streams; gravity and chemical precipitation. Filtration.

Folwell, *Sewerage Systems.*

28. **Theory of Trusses.**—Truss elements, loads and reactions for trusses of various designs, influence lines, and position of loads for maximum bending movement. Wheel-loads and conventional systems of analysis, stress-

strain diagrams, secondary stresses in trusses, applications to highway and railroad bridges.

Merriman and Jacoby, *Roofs and Bridges.*

29. **Roofs, Bridges, and Buildings.**—Different classes of bridges, riveted truss or lattice bridges, pin-connected bridge, design of details for roofs and bridges, floor systems, lateral and transverse bracing. The plate girder in detail, swing bridge (different kinds), end-lifting apparatus, machinery for operating cantilever structures, single and double track trestles or viaducts in steel or timber, elevated railroads, stand-pipes. Complete designs, with estimate of cost for structure and erection.

Merriman and Jacoby, *Roofs and Bridges.*

31. **Irrigation and Water Supply.**—Drainage areas, rainfall, evaporation. Reservoir construction. Dams for storage. Regulators. Distributing reservoirs and purification of water. Velocity of flow and dimensions of canals. Distributing and lateral canals.

32. **Contracts and Specifications.**—The law of contracts. General specifications; special clauses in engineering specifications. The study and draughting of complete contracts and specifications.

Johnson, *Contracts and Specifications.*

33. **Hydraulics.**—Flow of water through orifices and over weirs, gauging of weirs. Flow of water in canals. Formulæ for discharge of water from locks. Motion of water in pipes. System of pipes. Gauging water in rivers. Backflow. Resistance of water in a river, in a canal. Hydraulic motors. Ship railways.

Merriman, *Hydraulics.*

34. **Inspection Visits.**—Visits to engineering works and manufacturing establishments.

35. **Field Work.**—Compass and transit surveys. Farm survey. Leveling, profile, grading.

36. **Field Work.**—Triangulation. Topographical surveying with transit and stadia. Locating contours. Simple curves.

37. **Railroad Survey.**—Reconnaissance and preliminary survey. Location of line. Profile and cross-section. Computation of earth work. About two miles of road are run, and the students make all calculations required in the regular routine of office work.

38. **Materials of Construction.**—Stones: quarrying, working, employment. Bricks: manufacture and employment. Production and testing of lime, hydraulic lime, and cement; mortar; concrete; timber; metals; miscellaneous materials.

DRAWING.

39. **Mechanical Drawing.**—Use of instruments, geometrical problems, lettering, plans, elevations.

40. **Mechanical Drawing.**—Elementary projections, intersections, shades and shadows. Tinting drawings, pen-and-ink sketching.

41. **Drawing.**—Stone-cutting and its application to culverts, sewers, etc. Tracing and blue-prints.

42. **Descriptive Geometry.**—Demonstrations and execution of eight plates.

Faunce, *Descriptive Geometry.*

43. **Drawing.**—Plots of survey, topographical maps, contour maps, profiles.

44. **Graphic Statics.**—Resolution of concurrent and non-concurrent forces; determination of moments, of internal stresses, of centroids and moments of inertia. Application to roofs and trusses.

Merriman and Jacoby, *Graphic Statics.*

45. **Design Problems.**—Graphic solution of problems concerning the slope of embankments, earth pressure against retaining-walls and dams; stability of retaining-walls, dams and arches. Design of a masonry bridge with plan, elevation, longitudinal and cross-sections.

Series of ten plates of graphical determinations of stresses in girders and trusses.

46. **Bridge Design.**—Design of roof trusses and fixed steel bridges. Drawbridges. Elevated steel structures. Skeleton of a steel building. Computations and working drawings are made from specifications for a railroad bridge of short span, and estimates of its weight are prepared.

ECONOMICS, SOCIAL AND POLITICAL SCIENCE.

47. **Economics.**—Principles of production, distribution, exchange, money, banking, international trade-relation of labor and capital, present organization of industry, currency legislation of the United States. Economic history of England and America.

Sieger, *Introduction to Economics.*

48. **Principles of Government.**—Legislation, the judiciary, the executive, suffrage, and finance.

Wilson, *The State.*

49. **Public Finance.**—Sources of state income. Development, classification, incidents and effects of principal taxes.

Adam's *Science of Finance.*

50. **Representative Government** in the United States and other countries.

51. **Sociology.**—Psychology of social types. Historical aspects of social organization, both ancient and modern. Study of modern social problems.

ENGLISH.

52. **English Composition.**—The principles of composition; the structure of the paragraph and the sentence; the forms of prose composition. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *Composition*: *Oral and Written.*

53. **English Composition.**—Advanced work in the forms of prose composition and in the study of prose diction. Analysis of illustrative selections. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *A College Manual of Rhetoric.*

54. **Advanced Argumentation.**—The principles of argumentation; analysis of arguments; study of the rules and tests of evidence; theory and practice of brief-drawing. One argumentative essay of considerable length developed from formal brief.

Baker and Huntington, *Principles of Argumentation.*

55. **The Short Story.**—The structure and form of the short story; assigned readings; practice in writing stories.

56. **Literary Criticism.**—Study of the chief forms of literary expression; practice in construction; reports on assigned readings.

57. **History of English Literature.**—An outline course in the history of English and American literature, accompanied by a study of masterpieces illustrating the several literary periods.

Christian Brothers, *English Literature.*

For reading and study: *The Prologue to the Canterbury Tales, Richard III., Twelfth Night, Pilgrim's Progress, The Rape of the Lock,* Addison's Essays, *Childe Harold,* Canto IV., *The Idylls of the King, The Second Spring, Kenilworth, Fabiola, The Marble Faun,* selections from American poetry.

58. **English Poetry of the Nineteenth Century.**—Wordsworth and his contemporaries; Tennyson, Browning, and the Victorian era; American poetry. The literary history of the period is outlined by lecture. Considerable poetry is assigned for private reading.

Brother Azarias, *Books and Reading.*

Ward, *English Poets,* Vol. IV.

59. **English Prose of the Nineteenth Century.**—The essayists; the development of the novel in the nineteenth century. Lectures; discussions; themes; assigned readings.

Brother Azarias, *Books and Reading.*

For reading and study: Selected essays of Newman, Lamb, De Quincey, Carlyle, and Emerson. *David Copperfield, The Mill on the Floss, Diana of the Crossways, Callista, Lorna Doone.*

60. **English Literature of the Seventeenth and Eighteenth Centuries.**—An outline history of the literary movements from the rise of Puritanism to the opening of the nineteenth century. Study of selected works of Milton, Pope, Addison, Goldsmith and Burke. Considerable matter assigned for private reading. Lectures, recitations, and reports.

61. **The Drama.**—The development of the drama in England, with special emphasis upon the Elizabethan drama. The following plays are read and discussed: *Everyman, Edward II., A Midsummer Night's Dream, Richard II., Hamlet, The Tempest, The Alchemist,* and *The Rivals.*

62. **Philosophy of Literature.**—A study of the fundamental principles of literature and style; the spiritual in literature; application of the principles of literary criticism to English and American authors.

Brother Azarias, *Philosophy of Literature.*
Winchester, *Principles of Literary Criticism.*

FRENCH.

63. **Intermediate.**—Review of grammar; practice in speaking and writing French.

Fraser and Squair, *French Grammar.*

Bazin, *Les Oberlé;* Dumas, *La Question d'Argent;* Hugo, *Ruy Blas;* Chateaubriand, *Extraits.*

64. **Advanced.**—Practice in speaking and writing French.

Mansion, *French Composition.*
Lamartine, *Méditations.*
Coppée, *Le Luthier de Crémone, Le Trésor.*
Rostand, *La Princesse Lointaine.*

65. **Seventeenth Century.**—Prose and classic drama.
Bossuet, *Choix de Sermons et d'Oraisons.*
Corneille, *Cinna, Le Cid.*
Molière, *Le Misanthrope.*
La Fontaine, *Fables.*
Racine, *Andromaque.*

66. **The History of French Literature.**—The outlines of French literature. Lectures, assigned readings chiefly from authors of the eighteenth and nineteenth centuries.

Doumic, *Histoire de la Littérature Francaise.*

GEOLOGY.

67. **General Geology.**—Lectures and recitations. The following topics are discussed: Origin of the earth; external and internal processes and the land produced by them; organisms as rock makers; a brief history of the earth, organic and inorganic.

Scott, *Introduction to Geology.*

GERMAN.

69. **Intermediate.**—Review of grammar; prose composition; reading.

Thomas, *German Grammar;* Keller, *Kleider Machen Leute;* Hauff, *Lichtenstein;* Freytag, *Soll und Haben;* Schiller, *Wilhelm Tell;* Goethe, *Hermann und Dorothea.*

70. **Advanced.**—Syntax; prose composition; reading and conversation.

Thomas, *German Grammar;* Tombo, *Deutsche Reden;* Freytag, *Bilder aus der deutschen Vergangenheit;* Uhland, poems; Heine, selections; Lessing, *Minna von Barnhelm;* Schiller, *Die Jungfrau von Orleans.*

71. **The German Drama.**—The classic drama; the romantic school; modern German drama. Essays in German.

The following plays will be studied in class: Lessing, *Nathan der Weise;* Goethe, *Iphigenie;* Schiller, *Maria Stuart* and *Wallenstein's Tod;* Kleist, *Prinz von Homburg;* Grillparzer, *Der Traum ein Leben;* Fulda, *Der Talisman.*

72. **The History of German Literature.**—Outlines of the history of German literature. Lectures and discussions. Readings assigned by the instructor.

Thomas, *German Literature.*

Thomas, *German Anthology.*

HISTORY.

74. **Ancient History.**—History of Greece, with special reference to its literature, politics and commerce.

75. **Ancient History.**—Rome, from the founding of the City to the fall of the Western Roman Empire, with special reference to literature, politics and commerce.

76. **Medieval History.**—From the fall of the Western to the fall of the Eastern Roman Empire. The Holy Roman Empire and the Papacy receive special attention.

77. **Modern History.**—The principal subjects studied are the revival of learning, the age of discovery, the Reformation in England, France and Germany, the Thirty Years' War, the age of Louis XIV, the French Revolution, the nineteenth century.

80. **The History of the Nineteenth Century.**—This course treats principally of the restoration of the Bourbons, the Revolutions of 1830 and 1848, the Austro-Prussian war, the Franco-Prussian war, the unification of Germany and of Italy.

81.—**American Political Institutions.**—Nature of state and national systems; organization and powers of legislative, executive, and judicial departments of Federal Government.

82. **European Constitutions.**—Political institutions of England and Switzerland as compared with those of the United States.

83. **Constitutional History of the United States.**—Colonial Governments, the confederation, the federal constitution, national vs. state sovereignty.

84. **Constitutional History of the United States.**—War of 1812, federal judiciary, nullification act, state constitutions, the Civil War.

85. **The Philosophy of History,** based principally on the works of Balmes, Schlegel and Allies.

86. **Church History.**—From the founding of the Church to the Protestant Reformation, based on the works of Allies, Montalembert, Mann, Janssen, and Pastor. Illustrated lectures including the history and geography of the Holy Land.

ITALIAN.

87. **Elementary Course.**—Grammar, composition, reading.

Marinoni, *Italian Grammar* and *Italian Reader;* De Amici, *Cuore;* Manzoni, *I Promessi Sposi.*

88. **Dante.**—

The *Vita Nuova;* the *Divina Commedia.*

MATHEMATICS.

89. **Algebra.**—Advanced algebra.

Hawkes, *Advanced Algebra.*

90. **Trigonometry.**—Plane and spherical.

Wentworth, *Plane and Spherical Trigonometry.*

91. **Analytical Geometry.**—General equation of the second degree; straight line, plane, surfaces of revolution.

Nichols, *Analytical Geometry.*

93. **Calculus.**—Differential and integral, with application to geometry, mechanics, engineering and physics.

Osborne, *Differential and Integral Calculus.*

MECHANICS.

94. **Mechanics.**—Principles of statics and dynamics.

Maurer, *Technical Mechanics,* Part I.

95. **Mechanics of Materials.**—Resistance and elasticity of materials, cantilever, simple and continuous beams, columns, torsion and shafts, stresses, resilience, tension and compression, flexure in beams, shear and torsion, true and apparent stresses, design and construction of beams in wood and steel, design of girders.

Merriman, *Mechanics of Materials.*

96. Mechanics of Solids and Liquids.— Statics of concurrent and parallel forces, theory of couples, friction, mass-moments. Theorems of Guldinus. Work and energy. Impulsive forces. Angular velocity and acceleration. Simple harmonic motion. Centroids of surfaces and solids. Moments of inertia with application to engineering problems. The conical and the ordinary pendulum. Pressure due to gravitating liquids, center of pressure, equilibrium of floating bodies.

Bowser, *Analytical Mechanics.*

Bowser, *Hydromechanics.*

PEDAGOGY.

97. Principles of Education.—The educative process. The physical, mental, and moral laws upon which education is based. Aims and ideals of Catholic education. The teacher and his qualifications. School organization, hygiene and discipline. Aids to teaching.

Harris, *Psychologic Foundations of Education.*

Horne, *The Philosophy of Education.*

Shields, *The Psychology of Education.*

Horne, *The Psychology of Education.*

98. Methods in Teaching.—Meaning of instruction and its relation to education. The psychologic and logical views of knowledge. The psychologic basis of method. Its general principles. The function of the recitation. The conduct of the recitation.

Collar and Crook, *School Management and Methods of Instruction.*

Brothers of the Christian Schools, *Elements of Practical Pedagogy.*

McMurry, *Method of the Recitation.*

99. **History of Education (Ancient and Medieval).** Chinese, Hindoos, Egyptians, Persians, Israelites, Greeks and Romans. Education during the Middle Ages: Monasticism, Scholasticism. The Crusades. Rise of Universities. Noted Educators.

Monroe, *Text-book in the History of Education.*

100. **History of Education (Modern).**—The Renaissance; Humanism; the Reformation; Catholic education; history of education in the United States.

Monroe, *Text-book in the History of Education.*

PHILOSOPHY.

101. **Formal Logic.**—The idea. Errors as to the nature of ideas in modern English and German philosophy. Definition. Division. The nature of judgment. The value of the syllogism.

102. **Critical Logic.**—The possibility of certainty. Scepticism. Veracity of the senses and the intellect. Idealism vs. Realism. Universals. Authority and belief.

103. **Method.**—General principles. Special methods. Deduction and induction. Methods of observation. Methods of explanation.

104. **Metaphysics.**—The Aristotelian transcendentals. Reality of substances. Causation. Errors concerning causation. Final causes.

105. **Cosmic Philosophy.**—Nature, origin, and duration of the universe. Ultimate constituents of bodies. Theory of matter and form. Laws of nature. Possibility of miracles. The concepts of natural science and scholastic philosophy.

106. **Psychology.**—Rational vs. experimental psychology; value of each. Faculty, habit and action. The life principle. Vegetative Life. Theory of sensation. Qualities of sensation. Intellection. Attention. Apperception Association of ideas. Evolutionism. Heredity. Freedom of will. Spirituality and immortality of the soul.

107. **The Psychology of Education.**—A study of mental development. The psychological basis of education and of methods of teaching. Refutation of prevalent errors in educational psychology.

108. **Epistemology.**—Critical examination of various theories of knowledge.

109.—**Natural Theology.**—Proof of God's existence and providence—Deism, pantheism, agnosticism, atheism. Existence of evil. Preservation of creatures. Divine concurrence.

110. **General Ethics.**—Nature of a human act. Ultimate end of human actions. Determinants of morality. Does the end justify the means? Hindrances to the perfection of a human act. The passions, habit, virtue, vice.

111. **Special Ethics.**—Man's rights and duties as an individual. Man's duties to God—Adoration, love, obedience. Man's duties to his neighbor as regards soul and body. Man's duties to himself as to soul and body. Suicide and duelling.

Man's rights and duties as citizen. The state. Its constituent elements. Its origin, end, scope, and limits.

Common law of nations. Peaceful relations among nations.

Ecclesiastical society. The Church—Its origin and constitution. Its ends and limits. Its superiority to the state. Its mission to the modern world.

112. **Experimental Psychology.**—Elements and general methods. Elements of mental life; sensation, feeling, conation. Experiments on the outer senses and on the association of ideas with special application to pedagogy.

113. **History of Philosophy.**—Principles of the great founders of Ancient Schools; their vitality as illustrated in modern views. History of Medieval philosophy. History of Modern philosophy. The Neo-Scholastic movement.

Turner, *History of Philosophy.*

PHYSICS.

114. **Mechanics.**—Matter and energy. Kinematics; rectilinear, curvilinear, and periodic motion. Dynamics; laws of motion, work and energy, rotation, equilibrium, elasticity, machines. Mechanics of fluids; molecular phenomena in fluids, density and specific gravity, fluids in motion, properties of gases.

Light.—Laws of propagation, velocity and intensity of light. Photometry. Reflection and refraction; formation of images by mirrors and lenses. Spectrum analysis and study of optical instruments.

Heat.—Temperature and its measurement. Expansion of solids, liquids and gases. Change of state. Conduction, convection, radiation and absorption of heat. Vapor tension. Latent heat and specific heat. Relation between heat and work; energy, actual and potential.

Sound.—Production and propagation, velocity, reflection and refraction. Simple cases of resonance and interference. Intensity, pitch and quality. Transverse vibrations of strings. Longitudinal vibration of columns of air and of rods; vibrations of plates and membranes. Determination of pitch and wave-length. Doppler's principle and applications.

Electricity and Magnetism.—Fundamental phenomena of static electricity; general laws of distribution and induction. The Leyden jar and other condensers. Influence machines. Atmospheric electricity. Use of quadrant electrometer. Primary and secondary batteries; electromotive force, strength of current, division of current in a network of conductors. Ohm's law and applications. Magnetic, thermal and chemical effects of the current. Laws of electrolysis. Measurement of current and resistance. The electromagnet. Current induction, induction by magnets, the induction coil, discharge in low and high vacua. Continuous-current dynamo and motor; the alternator. The electric transmission of energy. Electric lighting. Thermo-electric currents. Telegraphy and telephony. Wireless telegraphy.

Permanent magnets and molecular theory; magnetic induction; the magnetic circuit. Comparison of magnetic fields. Theory and use of the magnetometer and dip-circle. Terrestrial magnetism and determination of the magnetic elements; magnetic charts.

Carhart, *College Physics*.

Physical Laboratory.—Study of the magnetic field due to a magnet and combination of magnets. Curve of free magnetism. Law of the inverse square. Comparison of magnetic moments. The ratio $\frac{M}{H}$ also the product

$\frac{M}{H}$. Determination of magnetic dip. Laying out the meridian; magnetic declination. Measurement of electromotive force, resistance of conductors, and capacity of condensers. Battery resistance and current strength. Measurements relating to storage batteries. Use of the tangent galvanometer, ammeter and voltmeter for direct and alternating currents; the wattmeter and electrodynamometer; the copper voltameter. Quantitative estimate of heat development in a circuit.

PUBLIC SPEAKING.

116. **Oral Interpretation.**—Drill in articulation, intonation and gesture. Practice in short declamations. Individual and class criticism.

117. **Oral Interpretation.**—Lectures. Drill in articulation, intonation and gesture. Choice passages from the poets and prose writers of English literature. Individual and class criticism.

118. **Argumentative Oratory.**—Study of the oratorical principles of argumentation. Analysis of notable arguments. Practice in debate and in extempore speaking.

119. **Public Address.**—Preparation and delivery of original compositions with special reference to the occasion and timeliness of the material used. Extempore addresses.

RELIGION.

121. **Dogma.**—Explanation of the principal dogmas, with special insistence on the continuity of the Church. The Church and science. Objections.

Christian Brothers, *Manual of Christian Doctrine,* Part I.

122. **Moral.**—Explanation of the fundamental principles of Christian morality as contained in the decalogue.

Christian Brothers, *Manual of Christian Doctrine,* Part II.

123. **Worship.**—Grace, prayer, and the sacraments, with special references to the Council of Trent and the tenets of Protestantism.

Christian Brothers, *Manual of Christian Doctrine,* Part III.

SPANISH.

124. **Elementary.**—Grammar, reading, composition.

Hills and Ford, *Spanish Grammar;* Ramsey, *Elementary Reader;* Alarcon, *El Capitán Veneno;* Valera, *El Pajaro Verde.*

125. **Intermediate.**—Reading, conversation, composition.

Ford, *Spanish Composition;* Cervantes, *Don Quijote;* Pereda, *Pedro Sánchez;* Moratin, *El Si de las Ninas.*

126. **Advanced.**—Composition, conversation. Calderon, *El Principe Constante; La Vida es Sueno;* Lope de Vega, *La Estrella de Sevilla.*

MANHATTAN COLLEGE HIGH SCHOOL.

The aim of the High School is to prepare for admission to college. The studies conform to the *Syllabus for Secondary Schools* of the New York State Education Department.

The requirements for admission are the preliminary studies prescribed by the Education Department. The most favorable time for entrance is at the beginning of the scholastic year. The regular examinations for admission take place on the two days immediately preceding each term.

The classes are frequently examined, and students are not allowed to pass from one subject to another until they have given evidence of adequate knowledge of the subject. A student who shows by the results of the examinations that he is unable to keep up with his class will be placed in a lower grade.

The Inspector examines weekly the record of every pupil, and comments upon it before the professors and students of the class.

Summarized reports of the examinations are forwarded to the parents at the end of each quarter.

Since each report shows the exact standing of the student, it should be carefully examined by his parent or guardian.

Percentages are rated as follows: From 90 to 100, excellent; from 80 to 90, very good; from 70 to 80, good; under 60, unsatisfactory.

Promotions are based on the joint results of the quarterly examinations and the daily marks. No student will be promoted unless he attains an average of at least 60 per cent. in each subject, and a general average of 70 per cent.

Students who fail to get the average required in any subject may present themselves for examination on the two days immediately preceding the reopening in September. A fee of one dollar is required for each subject examined.

At least three hours a day should be given to the preparation of class work.

The active co-operation of parents with the faculty is essential to the progress of the student. Parents are therefore requested to insist upon regular attendance and careful preparation of class work.

Punctuality at all sessions and recitations is required.

In all cases of absence a written excuse from parents or guardian is required. This excuse will not be accepted in lieu of omitted class work.

Wednesday and Saturday afternoons are the regular weekly half-holidays.

Students who live in the College may not leave the grounds without authorization.

COMMERCIAL DEPARTMENT.

Students who desire to prepare for mercantile life will find every facility in the Commercial Department. This department comprises two years' work, and no student is admitted until he has satisfactorily completed the studies of the *second year* of high school.

The students receive a thorough course in standard business methods and in the science of accounts. A complete course in commercial arithmetic is given, and ample opportunity is afforded for the practice of shorthand and typewriting.

The Commercial course does not, however, confine its work to purely business branches. Subjects of general culture are also included. English composition and letter-writing receive special attention. The student is required to treat prescribed subjects in a manner that will enable him to write with ease and elegance. Questions relating to political economy and commercial law are discussed in the class-room in order to give the student correct ideas on the vital questions of daily life. Weekly lessons are given in the art of public speaking, in order that the student may acquire an easy and graceful delivery.

Students who complete the Commercial course receive a certificate as a guarantee of their fitness for mercantile employment.

COURSE OF STUDY—HIGH SCHOOL.

FIRST YEAR.

ENGLISH. (5)—Hanson, *Two Years Course in English Composition.*
Lowell, *The Vision of Sir Launfal;* Stevenson, *Treasure Island;* Coleridge, *The Ancient Mariner;* Parkman, *Oregon Trail.*

ALGEBRA. (5)—Through Quadratics.
Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Guerber, *Contes et Légendes.*

BIOLOGY. (5)—Hunter, *Elements of Biology.*

BUSINESS WRITING. (2).

DRAWING. (2)—Design, *Syllabus for Secondary Schools,* pp. 368-371.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Dogma.*

SECOND YEAR.

ENGLISH. (3)—Hanson, *Two Years Course in English Composition;* Irving, *Sketch Book;* Shakespeare, *Merchant of Venice;* Eliot, *Silas Marner;* Goldsmith, *The Deserted Village.*

PLANE GEOMETRY. (5)—Wentworth, *Plane Geometry.*

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*Figures in parentheses indicate the number of recitations a week.

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Daudet, *Neuf Contes Choisis;* Labiche et Martin, *La Poudre aux Yeux;* Mairet, *La Tâche du Petit Pierre.*

GERMAN. (5)—Spanhooft, *Lehrbuch der deutschen Sprache;* Guerber, *Märchen und Erzählungen,* Pt. I.

ANCIENT HISTORY. (3)—Wolfson, *Essentials in Ancient History.*

DRAWING. (2)—Representation, *Syllabus for Secondary Schools,* pp. 371-3.

RELIGION. (2)—Christian Brothers' Series No. 4, *Moral.*

THIRD YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric; The Sir Roger de Coverley Papers;* Shakespeare, *Henry V;* Dickens, *A Tale of Two Cities;* Tennyson, *Gareth and Lynette, Lancelot and Elaine* and *The Passing of Arthur.*

ELOCUTION. (1).

SOLID GEOMETRY (First Term). (4)—Wentworth, *Solid Geometry.*

INTERMEDIATE ALGEBRA (Second Term). (4)—Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Enault, *Le Chien du Capitaine;* Labiche, *La Grammaire;* Sarcey, *Le Siége de Paris;* Racine, *Esther.*

GERMAN. (5)—Spanhooft, *Lehrbuch;* Hillern, *Höher als die Kirche;* Schiller, *Der Neffe als Onkel;* Zschokke, *Der zerbrochene Krug;* Benedix, *Der Prozess.*

PHYSICS. (5)—Carhart and Chute, *First Principles of Physics;* Chester, Dean, Timmerman, *Laboratory Manual of Physics.*

DRAWING. (1)—*Syllabus for Secondary Schools,* pp. 373 and 374.

RELIGION. (2)—Christian Brothers Series No. 4, *Worship.*

FOURTH YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric;* Burke, *Speech on Conciliation with America;* Milton, *L'Allegro, Il Penseroso, Comus;* Macaulay, *Life of Johnson;* Shakespeare, *Macbeth.*

ELOCUTION. (1)

TRIGONOMETRY. (2)—Wentworth, *Plane and Spherical Trigonometry.*

FRENCH. (4)—Fraser and Squair, *Shorter French Course;* Lamartine, *Jeanne d'Arc;* Hugo, *Hernani;* Racine, *Athalie.*

GERMAN. (4)—Riehl, *Der Fluch der Schönheit;* Freytag, *Die Journalisten;* Schiller, *Wilhelm Tell;* Hatfield, *German Lyrics and Ballads.*

AMERICAN HISTORY AND CIVICS. (5)—Hart, *Essentials in American History;* Boynton, *School Civics.*

CHEMISTRY. (5)—Brownlee, *First Principles of Chemistry;* Brownlee, *Laboratory Exercises.*

DRAWING. (1)—*Syllabus for Secondary Schools,* pp. 374 376.

RELIGION. (2)—Christian Brothers' Series, No. 4, Complete.

COMMERCIAL COURSE.

For First and Second Years see pages 51 *and* 52.

THIRD YEAR.

ENGLISH. (3)—See English, p. 52.

ELOCUTION. (1)

CIVICS. (2)—See Civics, p. 54 (above).

COMMERCIAL LAW. (3)—Richardson, *Commercial Law.*

FRENCH. (5)—See French, p. 53.

or

GERMAN. (5)—See German, p. 53.

or

SPANISH. (5)—See Spanish, No. 124.

SHORTHAND. (5)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

TYPEWRITING. (2)—Smith, *A Practical Course in Touch Typewriting.*

COMMERCIAL ARITHMETIC. (4)—Moore and Miner, *Practical Business Arithmetic.*

RELIGION. (2)—See Religion, p. 53.

FOURTH YEAR.

ENGLISH. (3)—See English, p. 53.

ELOCUTION. (1)

POLITICAL ECONOMY. (3)—Laughlin, *Elements of Political Economy.*

FRENCH. (5)—See French, p. 53.

or

GERMAN. (5)—See German, p. 54.

or

SPANISH. (5)—See Spanish, No. 125.

SHORTHAND AND TYPEWRITING. (6)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

BOOKKEEPING. (5)—Montgomery, *Bookkeeping and Business Practice.*

RELIGION. (2)—See Religion, p. 54.

PRIZES AND MEDALS.

COLLEGE.

1. A purse of $50 is awarded by the Alumni Society to the best English essayist of the graduating class. The prize contest consists of two essays, one prepared and the other extemporaneous. The subject of the first is announced at the beginning of the month of October, and the essay must be presented not later than the second Tuesday of April. The subject of the second is announced when the candidates are assembled to write the essay.

2. The Milmo-McGowan Medal for religious instruction was founded by Mrs. B. McGowan, in memory of her son, Mr. Michael J. McGowan, '69. This medal is awarded on competitive examination on the subject matter of the four years' course in Christian doctrine and church history. The examination takes place at the end of May.

3. The Kelly Medal for philosophy, offered to the students of the Senior Class, was founded by the late Mr. Eugene Kelly, of New York City. This medal is awarded for proficiency in logic, metaphysics, and psychology.

4. The Grady Memorial Medal for oratory was founded by the Alumni Society in memory of Rev. John M. Grady, '69. The contest for this medal is open to all College students.

5. The medal for the philosophy of history, donated by the Rt. Rev. Mgr. Matthew A. Taylor, LL.D., of New York City, is awarded to the student of the Senior Class who obtains the highest average in this subject.

6. The medal for pedagogy is awarded to the student who obtains the highest average in this subject during Junior and Senior years.

7. The Cohalan medal for civil engineering, the gift of Hon. Daniel F. Cohalan, LL.D., '85, in memory of his father, is awarded to the Senior student who has the highest record for the year in the civil engineering course.

8. The Develin Medal for French, founded by Mr. Charles E. Miller, of New York City, in honor of his friend, Mr. John E. Develin, is awarded by competitive examination on the matter of the four years' College course.

9. The Ridder Purse of fifty dollars for experimental physics is offered by Mr. Herman Ridder to the student of the Freshman Class who obtains the highest marks in physics during the year.

10. The Doelger Medal for German, the gift of Mrs. Doelger, in memory of the late Peter Doelger, is awarded to the student who has the highest record for the four years' college course in German.

HIGH SCHOOL.

1. The Medal for Elocution is awarded by competition among the students of the High School department.

2. The Medal for Excellence is awarded to the pupil who has the highest general average for the fourth year of the High School course.

3. The Brother Charles Memorial Medal, donated by the Commercial Alumni Society, is awarded to the student of the Commercial department who has the highest record for proficiency throughout the course.

4. The Kean Medal for Christian Doctrine, donated by the Rt. Rev. Mgr. John J. Kean, LL.D., '66, is open to all students of the Commercial Department.

5. The Pommerer Medal, donated by William C. Pommerer, M.A., '91, is awarded to the student of the graduating class who passes the best examination in shorthand and typewriting.

COLLEGE SOCIETIES.

THE APOSTLESHIP OF PRAYER
and
LEAGUE OF THE SACRED HEART.

The Apostleship of Prayer and League of the Sacred Heart is established in the College and High School departments to foster among the students the spirit of piety, to enable them to acquire more thoroughly the spirit of Christianity, and to kindle in them zeal for works of reparation towards our Divine Lord.

The Communion of Reparation is made every first Friday, and the morning offering and daily "decade" form a part of the regular class exercises. Devotions in honor of the Sacred Heart are held in the College chapel on the first Friday of each month.

THE ARCH-CONFRATERNITY OF THE HOLY INFANT JESUS.

This Archconfraternity has been erected in the chapel of the Brothers of the Christian Schools at Bethlehem. To it belong pupils of the Brothers' schools throughout the world. Its end is to obtain from Heaven through the Divine Child Jesus: 1st, That God may have the first place in all the studies in educational establishments; 2nd, that teachers and pupils may be everywhere free to observe the laws of Holy Church without any restraint whatever; 3rd, that Catholic children may not be exposed to lose their faith in schools where God is not recognized. The Archconfraternity publishes a quarterly review entitled *Echoes of Bethlehem.*

MANHATTAN COLLEGE ALUMNI SOCIETY.

The object of the Society is to keep alive among the Alumni a sentiment of affection for their Alma Mater, and to unite the graduates of successive years by a common tie of fellowship.

Regular meetings are held on Commencement day (after the graduating exercises) and on or about the first of February.

There are three reunions of the Society each year; at the Alumni dinner, at the Memorial Mass on Decoration day, and at the reception of the newly-graduated class on Commencement day.

Officers.

President	Edward C. McParlan, '93
First Vice-President	John E. Kiffin, '99
Second Vice-President	Hon. Peter A. Sheil, '96
Third Vice-President	Joseph A. Dillon, M.D., '87
Secretary	Walter T. Murphy, '09
Treasurer	Rev. Edward J. Deevy, '05
Historian	Rev. Brother Chrysostom, '81

MANHATTAN COMMERCIAL ALUMNI SOCIETY.

The Manhattan Commercial Alumni Association was organized September 5, 1901. Two meetings are held yearly.

Officers.

President	William C. Pommerer, '91
First Vice-President	James F. Kelly, '05
Second Vice-President	Christopher M. Leonard, '10
Secretary	Thomas P. Hale, '12
Treasurer	James A. Smyth, '08
Historian	Rev. Brother Chrysostom, '81

DE LA SALLE LITERARY SOCIETY.

This Society is confined to the students of the Senior year. The end proposed is the free discussion of questions pertaining to Philosophy, which have been suggested, but not fully treated in the class-room. The Professor of Philosophy acts as Moderator.

Officers.

President	William F. Lally
Vice-President	Bryan J. McEntegart
Secretary	Henry C. Kelly
Treasurer	John H. Moriarty
Critic	Philip A. Murphy
Historian	George P. Becker

NEWMAN LITERARY SOCIETY.

The members of the Junior Class form this Society. The exercises, consisting of original essays and debates on literary or other subjects, are held weekly. The Professor of English literature acts as Moderator.

Officers.

President	Joseph M. Cunningham
Vice-President	William A. Farrell
Secretary	Thomas D. Kelly
Treasurer	John G. Murphy
Critic	Richard D. McCann
Historian	Charles J. Cunningham

HUGHES LITERARY SOCIETY.

This Society consists of the students of the Sophomore year. Meetings are held twice a month, the principal exercises of which are debates on historical and scientific subjects, and on questions of the day, as well as essays on various topics. The senior Professor of the class is Moderator of the Society.

Officers.

President	Joseph A. McEntire
Vice-President	Daniel J. Houlihan
Secretary	Bernard J. Farrell
Treasurer	Frederick F. Faraci
Critic	Francis A. Fritz
Historian	Woolson F. McCormack

McCLOSKEY LITERARY SOCIETY.

This Society, composed of the members of the Freshman Class, holds its regular meeting on Friday afternoon. The exercises consist principally of debates on various subjects and essays on literary and historical topics. The Professor of English literature is Moderator of the Society.

Officers.

President	Joseph A. Corbalis
Vice-President	John P. Bingham
Secretary	Edward T. McNierney
Treasurer	Thomas V. McEntegart
Critic	John V. Timoney

CORRIGAN LITERARY SOCIETY.

The students of the Fourth Year High School have formed a literary society, which they have named after the late Archbishop of New York. They hold regular monthly meetings, and sometimes class exercises, to which the College students are invited. The senior Professor of the class acts as Moderator.

Officers.

President	Joseph G. Stalb
Vice-President	John J. Jansen
Secretary	George J. Clift
Treasurer	Thomas F. Kelly

FARLEY LITERARY SOCIETY.

This Society is composed of the Senior students of the Commercial Department. Literary exercises and discussions of questions pertaining to business and commerce constitute the program for the weekly meetings. The Principal of the Department acts as Moderator.

Officers.

President	John P. O'Donnell
Vice-President	Francis D. Ward
Secretary	Anthony A. Kühnel
Treasurer	John R. Norton
Critic	John M. Dyer
Historian	Joseph A. Lynch

THE MANHATTAN COLLEGE ENGINEERING SOCIETY.

Membership in this society is limited to students of engineering in the Junior and the Senior class. Meetings are held bi-weekly, at which papers are read by students and discussed by students and instructors.

President	Daniel A. Draddy
Vice-President	John G. Murphy
Secretary	Henry C. Kelly
Treasurer	Rupert W. Fagan
Historian	Joseph P. Carey

MANHATTAN COLLEGE ATHLETIC ASSOCIATION.

President	Henry C. Kelly
Vice-President	Robert E. Dunn
Secretary	Amos P. Silkworth
Treasurer	William F. Lally
Press Agent	Raymond T. O'Connor
Manager, Baseball	Joseph P. Carey
Assistant Manager, Baseball	Joseph M. Cunningham
Manager, Basketball	John J. Barrett
Assistant Manager, Basketball	Rupert W. Fagan
Manager, Track	William A. Farrell
Assistant Manager, Track	Francis A. Fritz
Faculty Dtr. of Athletics	Rev. Brother M. Sulpicius

COLLEGE PUBLICATIONS.

THE MANHATTAN QUARTERLY.

The *Manhattan Quarterly* is a literary magazine published by the students of Manhattan College during the months of January, April, July, and October. Its object is to encourage among the students literary composition of a high order of merit, and to serve as a link between former students of Manhattan and their Alma Mater, by keeping them in touch with the leading thought of the College and of the Alumni Society.

STAFF.

Editor-in-Chief—WILLIAM F. LALLY, '13.

Associate Editors—BRYAN J. MCENTEGART, '13; WILLIAM A. FARRELL, '14.

Exchange Editors—LAWRENCE L. CASSIDY, '13; DANIEL A. DRADDY, '13.

Alumni Editor—JOSÉ M. FERRER, M.D., '76.

Athletics—WILLIAM V. ENRIGHT, '13; THOMAS V. MCENTEGART, '16.

Current Topics—GEORGE J. CONNOLLY, '15.

Business Manager—JOHN H. MORIARTY, '13.

THE NEWS LETTER.

The *News Letter* was founded in 1900, mainly through the energy of Dr. José M. Ferrer, '76, and the generosity of members of the Alumni Society. It is published monthly from October to June. The chief object of the publication is to give College news, and also items of interest concerning graduates of the various departments.

REGISTER OF STUDENTS—1912-1913

ADRIAN, FRANK M.	Pleasantville, N. Y.
ADRIAN, LAWRENCE J.	Pleasantville, N. Y.
ALVAREZ, WILLIAM	Havana, Cuba.
BARRETT, JOHN J.	New York City.
BARRY, RICHARD J.	Long Island City, N. Y.
BASSINE, BERNARD J.	Edgewater, N. J.
BECKER, GEORGE P.	New York City.
BEGLEY, DANIEL J.	New York City.
BERGEN, JOHN J.	New York City.
BERTRAN, JUAN	Humacao, Porto Rico.
BIGLEY, JOHN F.	New York City.
BINGHAM, JOHN P.	New York City.
BOLTON, HENRY M.	Portageville, N. Y.
BOYNE, THOMAS	Bloomfield, N. J.
BREEN, FRANCIS	New York City.
BROSNAN, LORENZ J.	New York City.
BURKE, THOMAS F., JR.	New York City.
CAFFREY, WILLIAM	Far Rockaway, N. Y.
CALLANAN, JOSEPH V.	New York City.
CANAVAN, FRANCIS J.	New York City.
CAREY, JOSEPH P.	New York City.
CARROZZA, JOHN F.	Yonkers, N. Y.
CARROLL, THOMAS P.	New York City.
CARROLL, HUGH J.	New York City.
CASEY, JOSEPH I.	New York City.
CASSIDY, LAWRENCE	New York City.
CAVANAGH, JAMES A.	New York City.
CINCOTTI, FREDERICK	New York City.
CLEARY, ELMER	New York City.
CLEARY, JOHN M.	New York City.
CLIFFORD, ROBERT	New York City.
CLIFT, GEORGE J.	New York City.
COCHRAN, FRANK W.	New York City.
COCHRAN, EDMOND W.	New York City.
COLLINS, WILLIAM	New York City.
CONIFREY, JOHN F.	New York City.
CONNOLLY, GEORGE J.	New York City.

COONEY, THOMAS F.	New York City.
COON, PHILIP W.	New York City.
CORBALIS, JOSEPH A.	Yonkers, N. Y.
CORDOVA, CHARLES E.	Quito, Ecuador.
CORDOVA, GONZALO	Quito, Ecuador.
COSTA, JOHN J.	New York City.
CREGAN, MICHAEL A.	New York City.
CROKER, ARTHUR G.	New York City.
CRUISE, GERALD V.	New York City.
CUNNINGHAM, CHARLES J.	Dobbs Ferry, N. Y.
CUNNINGHAM, JOSEPH M.	New York City.
CURLEY, FRANK	New York City.
DEL BELLO, SYLVESTER	Yonkers, N. Y.
DILLON, VERNON	Skaneateles, N. Y.
DONAHUE, JAMES	New York City.
DONOVAN, JOHN F.	New York City.
DORAN, THOMAS J.	Troy, N. Y.
DORANTES, RAFAEL	Mexico City, Mex.
DOWNING, FRANCIS J.	Buffalo, N. Y.
DOYLE, HENRY R.	Bloomfield, N. J.
DRADDY, DANIEL A.	New York City.
DRISCOLL, PATRICK J.	New York City.
DYER, JOHN M.	New York City.
DUFFY, CHARLES A.	New York City.
DUFFY, RICHARD J.	New York City.
DUGAN, JOHN J.	New York City.
DUNN, ROBERT E.	New York City.
DUNNE, JOHN J.	Riverdale, N. Y.
DWYER, WILLIAM J.	New York City.
DYER, JOHN M.	New York City.
DYKE, LEO C.	New York City.
ELIAS, JOSÉ P.	New York City.
ENRIGHT, WILLIAM V.	New York City.
ENTERLIN, FERDINAND J.	New York City.
FAGAN, RUPERT W.	New Britain, Conn.
FARACI, FREDERICK F.	New York City.
FARRELL, BERNARD J.	Mt. Vernon, N. Y.
FARRELL, THOMAS W.	New York City.
FENNELLY, LEO C.	New York City.

FINNEGAN, THOMAS	New York City.
FITZGERALD, GARRETT E.	Yonkers, N. Y.
FLANAGAN, CHARLES V.	New York City.
FLANAGAN, EDWARD W.	Troy, N. Y.
FLANAGAN, JAMES A.	New York City.
FLANNERY, FRANCIS	Yonkers, N. Y.
FLANNERY, GERARD J.	Yonkers, N. Y.
FLYNN, EDWARD J.	New York City.
FLYNN, THOMAS E.	Yonkers, N. Y.
FOLEY, JOHN	New York City.
FORD, JOSEPH P.	New York City.
FRITZ, FRANK A.	Butler, N. J.
FRYER, JOHN S.	New York City.
FULLAM, JOHN W.	New York City.
FULLAM, MARTIN A.	New York City.
GARLAND, GEORGE J.	Mt. Vernon, N. Y.
GAROFALO, ANTHONY A.	New York City.
GENTHON, RENÉ M.	Clifton, N. Y.
GOODBODY, EDWARD J.	New York City.
GOYA, FRANCISCO	Santiago de Cuba.
GRANAHAN, RICHARD	New York City.
GRAY, THOMAS J.	New York City.
GRIFFIN, JOHN A.	Jersey City, N. J.
GREGORY, JAMES A.	New York City.
GREEN, ROBERT F.	New York City.
HAGAN, FOSTER A.	New York City.
HAGAN, LE ROY F.	New York City.
HAGGARTY, JOHN J.	Los Angeles, Cal.
HALPIN, HARRY N.	Far Rockaway, N. Y.
HANLEY, JAMES P.	Providence, R. I.
HANLON, WILLIAM J.	New York City.
HARRITY, JOHN J.	New York City.
HARVEY, GEORGE B.	New York City.
HAUCK, WILLIAM M.	New York City.
HERNANDEZ, AVELINE	Havana, Cuba.
HAYWOOD, GEORGE N.	New York City.
HEROLD, ANTHONY J.	New York City.
HEROLD, JOHN J.	New York City.
HERR, FRANCIS M.	New York City.

HORGAN, RAYMOND	Nyack, N. Y.
HOULIHAN, GERALD A.	New York City.
HOULIHAN, WALTER	New York City.
HOULIHAN, CORNELIUS	New York City.
HOULIHAN, FRANCIS J	New York City.
HOULIHAN, DANIEL J.	New York City.
HOULIHAN, JAMES A.	New York City.
HULSEBOSCH, LEONARD A.	New York City.
JANSEN, JOHN H.	New York City.
JOYCE, EDWARD J.	Astoria, N. Y.
JURADO, SALVADOR	David, Rep. of Panama.
KANE, LEO J.	Yonkers, N. Y.
KASSAR, NICHOLAS C.	Brooklyn, N. Y.
KEANE, LAWRENCE F.	New York City.
KEARSING, JAMES G.	New York City.
KEARNEY, JAMES M.	New York City.
KELLY, ARTHUR A.	New York City.
KELLY, HARRY C.	Matteawan, N. Y.
KELLY, JOHN M.	Yonkers, N. Y.
KELLY, THOMAS D.	New York City.
KELLY, THOMAS F.	Lowell, Mass.
KELLY, WILLIAM A.	Brooklyn, N. Y.
KELLY, CHARLES A.	New York City.
KENNEDY, JOSEPH A. C.	New York City.
KENNEY, PETER H.	New York City.
KIERAN, CHARLES J.	Brooklyn, N. Y.
KILLEEN, HENRY S.	Buffalo, N. Y.
KUHNEL, ANTHONY	New York City.
KUSER, RUDOLF G.	New York City.
LALLY, WILLIAM F.	Yonkers, N. Y.
LAURIA, VINCENT P.	New York City.
LAWRENCE, JOSEPH E.	New York City.
LECLERCQ, GEORGE	Grantwood, N. J.
LEON, NARCISO	Pinar del Rio, Cuba.
LEWANDOWSKI, STEPHEN	Brooklyn, N. Y.
LOUGHRAN, WILLIAM H.	New York City.
LYNCH, CHARLES J.	New York City.
LYNCH, JOS. A.	Nyack, N. Y.
MAHONEY, FRANCIS J.	New York City.

MALLEN, JOSEPH	San Pedro de Macous, Santo Domingo.
MALONEY, DAVID E.	New York City.
MANAS, VINCENT	Mexico City, Mex.
MANCHESTER, PERCY L.	New York City.
MANGAN, DANIEL C.	Brooklyn, N. Y.
MARCH, JOSEPH F.	New York City.
MARCH, JAMES E.	New York City.
MARCH, WILLIAM McK.	New York City.
MASON, PATRICK	New York City.
McCABE, JOHN B.	New York City.
McCANN, RICHARD D.	New York City.
McCARNEY, THOMAS H.	New York City.
McCARTHY, DANIEL J.	New York City.
McCARTHY, WILLIAM J.	New York City.
McCONNELL, ARTHUR J.	New York City.
McCORMACK, WOOLSON F.	New York City.
McCRORKEN, JAMES M.	New York City.
McENTIRE, JOSEPH A.	New York City.
McENTEGART, BERNARD	New York City.
McENTEGART, JAMES A.	New York City.
McENTEGART, PATRICK	New York City.
McENTEGART, THOMAS V.	New York City.
McENTEGART, BRYAN J.	New York City.
McERLEAN, THOMAS	New York City.
McEVOY, PETER	New York City.
McGEE, THOMAS J.	New York City.
McGINITY, MARTIN J.	New York City.
McNIERNEY, EDWARD	Newark, N. J.
MILLET, JOHN J.	New York City.
MICHEL, GROVER T.	New York City.
MIRAGLIA, HUMBERT	New York City.
MEISTER, KARL	New York City.
MOLYNEAUX, WILLIAM E.	New York City.
MONAGHAN, THOMAS	New York City.
MOONEY, JOSEPH J.	New York City.
MORIARTY, JOHN H.	Jersey City, N. J.
MORGAN, THOMAS R.	New York City.
MORRISON, STAATS D.	Syracuse, N. Y.

MULLERY, STEPHEN P. .....New York City.
MURPHY, DANIEL J. ....Troy, N. Y.
MURPHY, JOHN G. ....New York City.
MURPHY, PHILIP A. ....Troy, N. Y.
MURRAY, HARRY A. ....New York City.
MURRAY, THOMAS B. .... New York City.
NOLAN, HUGH J. ....New York City.
NORTON, JOHN R. ....New York City.
O'BRIEN, WILLIAM ....New York City.
O'BRIEN, EDMUND A. ....New York City.
O'BRIEN, JOSEPH W. ....New York City.
O'CONNOR, JOSEPH J. ....New York City.
O'CONNOR, FRANCIS ....Manchester, N. H.
O'CONNOR, JAMES P. ....New York City.
O'CONNOR, THOMAS ....New York City.
O'CONNOR, EDWARD B. ......Tonawanda, N. Y.
O'CONNOR, RICHARD W. ....New York City.
O'CONNOR, RAYMOND ST. C..Percy, N. H.
O'CONNOR, THOMAS M. .....New York City.
O'DONNELL, JOHN P. ....New York City.
O'FLYNN, CHARLES J. ....New York City.
O'MARA, FRANK ....New York City.
ORDONEZ, ENRIQUE B. ......Quito, Ecuador.
O'REILLY, JOHN ....New York City.
O'REILLY, JAMES ....New York City.
OVALLE, JOHN ....Oeana, U. S. of Columbia.
OWENS, THOMAS R. ....Providence, R. I.
PENNEFATHER, ARTHUR G..New York City.
POWERS, JOHN J.............New York City.
PRIAL, FRANCIS P. ....New York City.
PETTIT, EARL V. ....Cuba, N. Y.
QUIGLEY, FRANCIS R. ....New York City.
QUINLAN, THOMAS J. ....New York City.
QUINLIVAN, JOHN F. ....Yonkers, N. Y.
QUINN, DENIS C. ....New York City.
QUINN, ROBERT ....New York City.
QUINN, WILLIAM D...........New York City.
REARDON, WARREN V. ......New York City.
RETALEATO, LOUIS J. ....New York City.

REVERT, LOUIS	Guantanamo, Cuba.
REYNOLDS, FRANK J.	Flushing, N. Y.
RIGNEY, HAROLD J.	New York City.
RILEY, JOHN A.	New York City.
ROBINSON, GEORGE P.	New York City.
ROGERS, DANIEL J.	New York City.
ROGERS, LEO T.	New York City.
ROOT, SIDNEY J.	New York City.
RYAN, JAMES R.	Hoboken, N. J.
RYAN, THOMAS V.	New York City.
RYAN, CHARLES T.	New York City.
RYAN, JOHN T.	Hoboken, N. J.
RYAN, WILLIAM P.	New York City.
SCALION, WALTER V.	New York City.
SCANLON, FRANCIS H.	North City.
SCOCOZZA, MICHAEL	New York City.
SEERY, PETER F.	Brooklyn, N. Y.
SHAW, CHRISTOPHER	Brooklyn, N. Y.
SHEEHY, PATRICK F.	New York City.
SHEPPARD, GEORGE A.	Yonkers, N. Y.
SHERLOCK, JOHN E.	Americus, Ga.
SILKWORTH, AMOS P.	New York City.
SLATTERY, FRANCIS V.	New York City.
SLEVIN, JAMES J.	Palisades Park, N. J.
SMITH, JAMES L.	New York City.
SMYTHE, EDWARD V.	New York City.
SOMERS, SYLVESTER A.	Brooklyn, N. Y.
STALB, JOSEPH G.	New York City.
SUAREZ, JOSÉ	Camajuani, Cuba.
SULLIVAN, WALTER J.	Brooklyn, N. Y.
SWEENY, FRANCIS J.	New York City.
TEBAR, ANTONIO M.	Cabello, Venezuela.
TERRIO, ARTHUR A.	Waltham, Mass.
THORNTON, EDWIN A.	New York City.
TIGHE, WILLIAM B.	Port Jervis, N. Y.
TIMONEY, JOHN P.	New York City.
VALDIVIESO, GUILLERMO	Quito, Ecuador.
VASTOLA, SAMUEL J.	Buffalo, N. Y.
VIGNATI, MARK J.	West Hoboken, N. Y.

WAGNER, KARL VON	Nyack, N. Y.
WARD, EUGENE J.	New York City.
WARD, FRANK D.	New York City.
WEIDEN, MATHIAS	New York City.
WELSH, JOHN A.	New York City.
WILKES, HAMMIL V.	New York City.
WHITE, JOSEPH F.	New York City.
ZIVI, FRANCIS J.	New York City.

FIFTY-NINTH - - - ANNUAL

COMMENCEMENT

of

MANHATTAN COLLEGE

His Eminence John Cardinal Farley
ARCHBISHOP OF NEW YORK
PRESIDING

CARNEGIE HALL

Tuesday, June 18, 1912, at 8 P. M.

ORDER OF EXERCISES

OVERTURE—"Lustspiel" ....*Keler Bela*

ORCHESTRA.

THE APOSTOLATE OF THE PRESS.

JOHN L. KELLY.

VOCAL QUARTET—"To Arms"...............*E. S. Hosmer*

MANHATTAN ALUMNI QUARTET.

SELECTION—"The Red Widow"......................*Gebert*

ORCHESTRA.

THE QUESTION OF THE HOUR.

FREDERICK A. SEUFERT.

CONCERT WALTZ—"Helmet of Navarre"..........*Herman*

POPE PIUS THE TENTH.

RALPH A. WOODEND.

VOCAL QUARTET—Selected.

DOCTOR'S ORATION.

VERY REV. JOHN P. CHIDWICK, D.D., '83.

CONFERRING OF DEGREES

ADDRESS TO THE GRADUATES

HON. THOMAS CARMODY,
Attorney General, State of New York.

THE DEGREE OF BACHELOR OF ARTS

JOHN ANTHONY COLUCCI
JOSEPH LEO MCGOLDRICK
WILLIAM JOSEPH DAMELIO
JOHN LA SALLE KELLY

THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

MICHAEL JOSEPH LYNCH
LOUIS JOSEPH BLANCHET
HENRY JOSEPH MCCADDEN
THOMAS JOHN MCENTEGART
FREDERICK ALOYSIUS SEUFERT
JOHN BAPTIST MENZIE
JAMES JOSEPH SUMMERS
DANIEL CHARLES BANDECCHA
FRANCIS MANUEL OTERO
ROBERT JOHN STIMPFLE
RALPH AUGUSTINE WOODEND

THE DEGREE OF CIVIL ENGINEER

EDWARD FRANCIS WEINBERG, '06
JOSEPH FREDERIC TAGGARD, '10
JOSEPH THOMAS KIERNAN, '12
JOHN REGINALD MCCARNEY, '12

HONORARY DEGREES.

MASTER OF ARTS

DANIEL JOSEPH DONOVAN, M.D.

MASTER OF SCIENCE

JOHN JAMES QUINN, Ph.D.

DOCTOR OF LAWS

VERY REV. JOHN P. CHIDWICK, D.D.
President of St. Joseph's Seminary, Dunwoodie, N. Y.

COMMERCIAL DIPLOMAS.

Francis William Clayton
John Robert Dillon
James Francis Durkin
Benedict Joseph Duggan
Daniel Francis Egan
Joseph Patrick Ford
John Joseph Harvey
Vincent William Horan
Thomas Patrick Hale
Bartholomew Francis Kenney
Joseph Francis McKinnon
William Francis Murray
B. Enrique Ordonez
Charles Aloysius Wolf
Frederick Francis Wheeler

COLLEGE PRIZES.

The Alumni Purse of Fifty Dollars for the best English Essay.

JOSEPH L. McGOLDRICK
Next in Merit, Louis J. Blanchet
Founded by the Alumni Society of Manhattan College.

The Herman Ridder Purse of Fifty Dollars for Experimental Physics.

BRYAN J. McENTEGART
Next in Merit, Edward V. Smyth
Donated by Mr. Herman Ridder, New York.

The Milmo McGowan Medal for Religious Instruction.

MICHAEL JOSEPH LYNCH
Next in Merit, Joseph Leo McGoldrick
Founded by Milmo McGowan, New York.

The Kelly Medal for Philosophy.

JOHN ANTHONY COLUCCI
Next in Merit, Michael Joseph Lynch
Founded by Eugene Kelly, New York

Medal for Philosophy of History.

JOSEPH LEO McGOLDRICK
Next in Merit, JOHN ANTHONY COLUCCI
Donated by Rt. Rev. Matthew Taylor, LL.D.

The Grady Memorial Medal for Oratory.

BRYAN J. McENTEGART
Next in Merit, RALPH A. WOODEND
Founded by the Alumni Society

The Cohalan Medal for Civil Engineering (Senior Class).

MICHAEL J. LYNCH
Next in Merit, LOUIS J. BLANCHET
In Memory of Mr. Timothy Cohalan
Donated by Hon. Daniel F. Cohalan, LL.D., '85.

The Doelger Medal for German.

GEORGE P. BECKER
Next in Merit, BRYAN J. McENTEGART
Donated by Mr. Peter Doelger

HIGH SCHOOL DEPARTMENT.

Medal for Elocution.

PATRICK J. McENTEGART
Next in Merit, JOHN F. LALLY
Donated by Richard R. Costello, M. A., '95.

COMMERCIAL DEPARTMENT.

The Brother Charles Gold Medal for General Proficiency.

THOMAS P. HALE
Next in Merit, FREDERICK F. WHEELER
Donated by the Commercial Alumni.

The Kean Medal for Christian Doctrine.

FREDERIC F. WHEELER
Next in Merit, THOMAS P. HALE.
Donated by Rt. Rev. Mgr. John J. Kean, LL.D., '66.

The Medal for Stenography and Typewriting.

DANIEL F. EGAN
Next in Merit, THOMAS P. HALE.
Donated by Wm. C. Pommerer, M.A., '91.

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J.S.

Manhattan College

New York

Catalogue

1914-1915

Catalogue
of
Manhattan College
and
Manhattan College
High School

NEW YORK

CONDUCTED BY
The BROTHERS of the CHRISTIAN SCHOOLS

1914-1915

A. W.

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General Calendar

1914

	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
JAN.	..	..	..	..	1	2	3
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	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
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COLLEGE CALENDAR.

1914.

Sept. 1-5,	Tuesday-Saturday	Registration.
Sept. 7-8,	Monday-Tuesday	Condition and Entrance Examinations.
Sept. 9,	Wednesday	Class Exercises begin.
Oct. 12,	Monday	Columbus Day, Holiday.
Oct. 19-21,	Monday-Wednesday	Annual Retreat.
Nov. 3,	Tuesday	Election Day.
Nov. 11,	Wednesday	Quarterly Examinations, High School.
Nov. 26,	Thursday	Thanksgiving Day.
Dec. 8,	Tuesday	Immaculate Conception, Holiday.
Dec. 19,	Saturday	Christmas Recess begins, 12 M.

1915.

Jan. 4,	Monday	Class Exercises resumed, 9 A. M.
Jan. 25,	Monday	Examinations.
Jan. 29-30,	Friday-Saturday	Entrance Examinations.
Feb. 1,	Monday	Second Term begins.
Feb. 12,	Friday	Lincoln Day.
Feb. 22,	Monday	Washington's Birthday. High School Contest in Elocution.
Mar. 29,	Monday	Contest for the Grady Medal for Oratory.
Mar. 30,	Tuesday	Easter Recess begins, 2:30 P. M.
Apr. 7,	Wednesday	Class Exercises resumed, 9 A. M.
Apr. 12,	Monday	Quarterly Examinations, High School.
May 13,	Thursday	Ascension Day, Holiday.
May 15,	Saturday	Feast of St. De La Salle.
May 31,	Monday	Decoration Day, Services for Deceased Alumni.
June 5,	Saturday	Examinations.
June 13,	Sunday	Baccalaureate Sermon.
June 15,	Tuesday	Commencement Exercises, General Meeting of the Alumni Societies.

OFFICERS OF THE COLLEGE

BROTHER GERARDUS
Chairman of Board of Trustees

BROTHER EDWARD
President

BROTHER AUGUST
Registrar

BROTHER POTAMIAN
Secretary

BROTHER ANGELUS
Treasurer

HISTORY AND ORGANIZATION.

THE institution now known as Manhattan College was opened in 1849 as an academy for young men who desired advanced instruction. From its original location in Canal Street, it was transferred in 1853 to its present site, where it was known as the Academy of the Holy Infancy. In 1863, it was incorporated by the Regents of the University of the State of New York under its present title, and empowered to confer the usual academic degrees.

The College offers two departments of study, the Department of Arts and the Department of Civil Engineering. The courses in the former lead to the degrees of Bachelor of Arts and Master of Arts; in the latter, to the degrees of Bachelor of Science in Civil Engineering and Civil Engineer. The requirements for admission into both departments and the respective courses of study will be found on pages 10 and 19.

As the vernacular language and literature constitute an essential feature of a sound education, special attention is given in both departments to the study of English. The importance of the natural and experimental sciences is emphasized in the courses given in biology, physics, chemistry, and geology. These courses are of special benefit to students preparing for medical school. Of no less advantage for the prospective law student are the courses in logic and political and social science. For students who intend to embrace the teaching profession, there are offered courses in pedagogy and in the history and psychology of education.

Besides the College proper, there is a High School department. This department offers two courses—a modern language course and a business course. The former, which corresponds to the ordinary four-year high school course, prepares directly for college entrance; the latter, which offers two years of commercial work, may be elected after the completion of two years' work in a regular high school course.

In both the Collegiate and High School departments, every attention is bestowed on the moral and religious training of the student. Christian doctrine is taught in all the classes. Regular attention to religious duties is required of all students. Though the College is Catholic in its tone and teaching, non-Catholic students are received.

The Library contains nearly 11,000 volumes, and additions are regularly made to keep the general reference section abreast of modern development. In the College Reading Room, the best current periodicals are kept on file.

The College Museums offer adequate facilities for research work in zoology, botany, geology and mineralogy.

EXPENSES.

Resident Students	$350 00
Day Students, College	100 00
Day Students, High School	75 00
Luncheon at College	50 00
Use of laboratory and apparatus for any one course	10 00
Use of typewriter	10 00
Use of library	2 00
Music: piano, $80; mandolin, $50; violin, $50	
Graduation	10 00
Certificate	5 00
Condition examinations, each subject	2 00
Athletics (collected by the College for the Athletic Association)	5 00

For books and stationery, cash payment is required.

Payment for the half session of five months is required **in advance.**

Remittances from outside New York City are to be made by draft or by post-office order payable at Station J.

REQUIREMENTS FOR ADMISSION.

The requirements for admission conform to the standards prescribed by the Regents of the University of the State of New York.

1. **English.**—The requirement in English is that recommended by the National Conference on Uniform Entrance Requirements in English.

REQUIREMENT FOR 1913, 1914, AND 1915

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence and appreciation.

ENGLISH GRAMMAR AND COMPOSITION

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, paragraphs, and the different kinds of whole composition, including letter-writing, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise narration, description and easy exposition and argument based upon simple outlines. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted efforts of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

LITERATURE

The second object is sought by means of two lists of books, headed, respectively, *Reading* and *Study*, from which may be framed a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

A, READING

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

The books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group 1.

Group 1

The *Old Testament*, comprising at least the chief narrative episodes in Genesis, Exodus, Josue, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther.

The *Odyssey*, with the omission, if desired, of Books 1, 2, 3, 4, 5, 15, 16, 17.

The *Iliad*, with the omission, if desired, of Books 11, 13, 14, 15, 17, 21.

The *Æneid*.

The *Odyssey*, *Iliad* and *Æneid* should be read in English translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group 2

Shakespeare's *The Merchant of Venice; Midsummer Night's Dream; As You Like It; Twelfth Night; Henry the Fifth; Julius Cæsar.*

Group 3

Defoe's *Robinson Crusoe, Part I;* Goldsmith's *The Vicar of Wakefield;* either Scott's *Ivanhoe*, or Scott's *Quentin Durward;* Hawthorne's *The House of the Seven Gables;* either Dickens' *David Copperfield*, or Dickens' *A Tale of Two Cities;* Thackeray's *Henry Esmond;* Mrs. Gaskell's *Cranford;* George Eliot's *Silas Marner;* Stevenson's *Treasure Island.*

Group 4

Bunyan's *Pilgrim's Progress, Part I; The Sir Roger de Coverley Papers* in the Spectator; Franklin's *Autobiography* (condensed); Irving's *Sketch Book;* Macaulay's Essays on *Lord Clive* and *Warren Hastings;* Thackeray's *English Humorists;* Selections from Lincoln, including at least two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, and Letter to Horace Greeley, along with a brief memoir or estimate; Parkman's *Oregon Trail;* either Thoreau's *Walden*, or Huxley's *Autobiography* and selections from *Lay Sermons*, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; Stevenson's *Inland Voyage* and *Travels with a Donkey.*

Group 5

Palgrave's *Golden Treasury* (First Series), Books II and III, with especial attention to Dryden, Collins, Gray, Cowper, and Burns; Gray's *Elegy in a Country Churchyard* and Goldsmith's *The Deserted Village;* Coleridge's *Ancient Mariner* and Lowell's *Vision of Sir Launfal;* Scott's *The Lady of the Lake;* Bryon's *Childe Harold*, Canto IV, and *Prisoner of Chillon;* Palgrave's *Golden Treasury* (*First Series*), *Book IV*, with especial attention to Wordsworth, Keats and Shelley; Poe's *Raven*, Longfellow's *Courtship of Miles Standish*, and Whittier's *Snow Bound;* Macauley's *Lays of Ancient Rome* and Arnold's *Sohrab and Rustum;* Tennyson's *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur;* Browning's *Cavalier Tunes*, *The Lost Leader*, *How They Brought the Good News from Ghent to Aix*, *Home Thoughts from Abroad*, *Home Thoughts from the Sea*, *Incident of the French Camp*, *Hervé Riel*, *Pheidippides*, *My Last Duchess*, *Up at a Villa—Down in the City.*

B, STUDY

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions. The books provided for study are:

Shakespeare, *Macbeth;* Milton, *L'Allegro*, *Il Penseroso*, and *Comus;* Burke, *Speech on Conciliation with America* or Washington, *Farewell Address*, and Webster, *First Bunker Hill Oration;* Carlyle, *Essay on Burns* or Macaulay, *Life of Johnson*.

EXAMINATION

However accurate in subject matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling or other essentials of good usage.

The examination will be divided into two parts, one of which may be taken as a preliminary, and the other as a final.

The first part of the examination will be upon ten units chosen, in accordance with the plan described earlier, from the lists headed *Reading;* and it may include also questions upon grammar and the simpler principles of rhetoric, and a short composition upon some topic drawn from the student's general knowledge or experience. On the books prescribed for reading, the form of the examination will usually be the writing of short paragraphs on several topics which the candidate may choose out of a considerable number. These topics will involve such knowledge and appreciation of plot, character-development and other qualities of style and treatment as may be fairly expected of boys and girls. In grammar and rhetoric, the candidate may be asked specific questions upon the practical essentials of these studies, such as the relation of the various parts of a sentence to one another, the construction of individual words in a sentence of reasonable difficulty, and those good usages of modern English which one should know in distinction from current errors.

The second part of the examination will include composition and those books comprised in the list headed *Study*. The test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books prescribed for study, from the candidate's other studies and from his personal knowledge and experiences quite apart from reading. For this purpose the examiner will provide several subjects, perhaps five or six, from which the candidate may make his own selections. The test on the books prescribed for study will consist of questions upon their content, form and structure and upon the meaning of such words, phrases and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works and the periods of literary history to which they belong.

2. **History.**—(a) Ancient History, and events down to 814 A. D.; (b) English History, or Mediæval and Modern History; (c) American History and Civics.

3. **Algebra.**—Wentworth, *Elementary Algebra*, or equivalent.

4. **Geometry.**—Wentworth, *Plane and Solid Geometry*, or equivalent.

5. **Plane Trigonometry.**—Wentworth, *Plane Trigonometry*, or equivalent.

6. **French.**—Grammar, sight translation, and composition based upon the following books:

De Maistre, *Voyage autour de ma Chambre;* Mairet, *La Tâche du petit Pierre;* Halévy, *L'Abbé Constantin;* Daudet, *Le Siége de Berlin*, and Merimée, *Colomba*.

7. **German.**—Grammar, sight translation and composition based upon the following books:

Hillern, *Höher als die Kirche;* Hauff, *Das Kalte Herz;* Freytag, *Die Journalisten;* Storm, *Immensee;* Benedix, *Der Prozess*.

8. **Chemistry.**—A course of at least sixty experiments made by the candidate, with note-book certified by the teacher.

9. Physics.—Knowledge of the general principles of physics, and their applications. Each candidate must present a note-book containing a description of at least forty experiments which he has performed.

The following will be accepted in place of French and German:

Latin.—Grammar, Allen & Greenough, or equivalent, including prosody. Cæsar, *Gallic War*, Books I-IV. Cicero, six orations. Reading at sight of a short passage of easy Latin prose. Virgil, *Æneid*, Books I-VI. Latin prose composition.

Greek.—Grammar, Goodwin, or equivalent, including prosody. Xenophon, *Anabasis*, Books I-III. Homer, *Iliad*, Books I-III. Greek prose composition.

Students presenting Latin and Greek for admission will be required to take a special course in French and German during the Freshman year, and will thereafter follow the regular program.

A certificate of the Regents of the University of the State of New York, or of approved schools, will be received in lieu of the entrance examination, provided it has been issued within the year. The candidate will, however, be examined on such branches as are not included in this certificate.

Candidates for admission must present a certificate of good character.

GENERAL REGULATIONS.

Examinations.—Examinations for admission are held at the College on the two days preceding the opening of each term.

The regular College term examinations are held during the last week of January and the second week of June.

In case of illness or for some other equally grave cause, a student may have his examination postponed.

Students absent for more than ten per cent. of the recitations in any subject will not be allowed to take the examination in that subject. Students absent on the two days following the Thanksgiving, Christmas, or Summer recesses, without permission, will be charged with two absences for each recitation missed.

For students who fail in the regular examinations, condition examinations are held at the College on the two days preceding the opening of the first term, and also on the first day of the Christmas and Easter recesses. Students are required to pay two dollars for an examination in each subject in which they are conditioned.

Rating.—The final standing of each student in any subject is determined by his examination results and his class-marks in that subject. Seventy per cent. constitutes a pass in each subject. A statement of the numerical standing of the student in each subject is sent to the parent or guardian at the close of each term.

Promotion.—No student will be allowed to take up Freshman work whose conditions on entrance exceed one and one-half units.* All entrance conditions must be removed before the beginning of Sophomore year.

No student will be allowed to take up Sophomore work whose failures in Freshman work exceed one and one-half units. No student will be allowed to take up Junior work whose failures exceed one unit in the work of the two previous years. No student will be allowed to take up Senior work who has any conditions.

Studies.—The studies of the course in civil engineering are prescribed throughout. In the Arts course, Freshman and Sophomore work is prescribed, and electives are offered in the Junior and Senior years. No elective course will be given unless there is a sufficient number of applicants.

Degrees.—Every candidate for a degree is required to present a typewritten thesis on a subject connected with his course. The subject selected must be submitted for approval to the Professor of the department to which it belongs, on or before February 1. Such help and guidance may be offered the candidate as the Professor may judge right, and the completed thesis shall be handed in for approval on or before May 30.

Theses shall contain not less than two thousand words, and must be typewritten on paper 13x8, with a margin of an inch and one-half. Science theses must be accompanied by the necessary drawings and illustrations. All approved theses become the property of the College and are placed in charge of the Librarian.

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* A unit is five recitations a week for one year in any subject. Two hours of laboratory work or two hours of drawing are equivalent to one hour's recitation.

If a student fail to present his thesis, or if the thesis be rejected, he shall not be recommended for his degree.

At the discretion of the Faculty, a certificate of proficiency may be given to a student who has followed, under the direction of the Faculty, a special course of one or more subjects, and who gives evidence of satisfactory proficiency.

Honors.—Students who attain an average of ninety per cent. in all the subjects of their College course, will be graduated with *Honor*. They will be graduated with *Credit* if they attain an average of from eighty-five to ninety per cent. in all the subjects of their College course.

COURSE OF STUDY.

ARTS DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	52, 57	ENGLISH	(5)	52, 57
PUBLIC SPEAKING	(1)	116	PUBLIC SPEAKING	(1)	116
FRENCH	(4)	63	FRENCH	(4)	63
GERMAN	(4)	69	GERMAN	(4)	69
HISTORY	(3)	74	HISTORY	(3)	75
MATHEMATICS	(3)	90	MATHEMATICS	(3)	89
PHYSICS	(2)	114	PHYSICS	(2)	115
PHYSICAL LABORATORY	(2)		PHYSICAL LABORATORY	(2)	
RELIGION	(2)	121	RELIGION	(2)	121

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	53, 58	ENGLISH	(5)	53, 59
PUBLIC SPEAKING	(1)	117	PUBLIC SPEAKING	(1)	117
FRENCH	(4)	64	FRENCH	(4)	64
GERMAN	(4)	70	GERMAN	(4)	70
HISTORY	(3)	76	HISTORY	(3)	77
CHEMISTRY	(1)	13	CHEMISTRY	(1)	13
CHEMICAL LABORATORY	(3)	14	CHEMICAL LABORATORY	(3)	14
RELIGION	(2)	122	RELIGION	(2)	122

The figures in parentheses indicate the number of hours a week; the others indicate the paragraphs in which the course is outlined.

JUNIOR CLASS.

FIRST TERM			SECOND TERM		
English	(5)	54, 60	English	(5)	55, 61
Public Speaking	(1)	118	Public Speaking	(1)	118
French	(3)	65	French	(3)	65
German	(3)	71	German	(3)	71
Philosophy	(4)	101, 102	Philosophy	(4)	106
Geology	(4)	67	Astronomy	(4)	1, 2
Economics	(2)	47	Economics	(2)	47
Religion	(2)	123	Religion	(2)	123

ELECTIVES.

FIRST TERM			SECOND TERM		
Pedagogy	(3)	97, 99	Pedagogy	(3)	97, 99
Biology	(4)	3	Biology	(4)	4
Spanish	(3)	124	Spanish	(3)	124
Italian	(3)	87	Italian	(3)	87
American Political Institutions	(1)	81	European Constitutions	(1)	82
Church History	(1)	86	Church History	(1)	86

SENIOR CLASS.

FIRST TERM			SECOND TERM		
English	(4)	56, 62	English	(4)	56, 62
Public Speaking	(1)	119	Public Speaking	(1)	119
French	(2)	66	French	(2)	66
German	(2)	72	German	(2)	72
History of Philosophy	(2)	113	History of Philosophy	(2)	113
Philosophy	(4)	104, 105	Philosophy	(4)	103
Philosophy of History	(2)	85	Philosophy of History	(2)	85
Natural Theology	(2)	109	Ethics	(2)	110, 111

ELECTIVES.

FIRST TERM			SECOND TERM		
Pedagogy	(3)	98, 100	Pedagogy	(3)	98, 100
Biology	(2)	5	Psychology of Education	(1)	107
Spanish	(2)	125	Biology	(2)	6
Italian	(2)	88	Spanish	(2)	125
Principles of Government	(3)	48	Italian	(2)	88
Public Finance	(2)	49	Sociology	(3)	51
American History	(2)	83	Representative Government	(2)	50
History of the 19th Century	(1)	80	American History	(2)	84
			History of the 19th Century	(1)	80

COURSE OF STUDY.

CIVIL ENGINEERING DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
English	(2)	52	English	(2)	52
Public Speaking	(1)	116	Public Speaking	(1)	116
Mathematics	(6)	90, 91	Mathematics	(6)	89, 91
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Surveying	(3)	16	Surveying	(3)	16
Descriptive Geometry	(2)	42	Descriptive Geometry	(2)	42
Drawing	(4)	39, 40	Drawing	(4)	39, 40
Religion	(2)	121	Religion	(2)	121

Summer Field Work, Three Weeks, 36

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
English	(2)	53	English	(2)	53
Public Speaking	(1)	117	Public Speaking	(1)	117
Mathematics	(3)	92	Mathematics	(3)	92
Mechanics	(3)	94	Mechanics	(3)	94
Chemistry	(1)	13	Chemistry	(1)	13
Chemical Laboratory	(3)	14	Chemical Laboratory	(3)	14
Drawing	(6)	41, 43	Surveying	(2)	17
Surveying	(3)	17	Graphic Statics	(2)	44
Religion	(2)	122	Drawing	(4)	41, 43
			Religion	(2)	122

Summer Field Work, Three Weeks, 37

JUNIOR CLASS.

FIRST TERM		
English	(2)	54
Public Speaking	(1)	118
Materials of Construction	(4)	22
Mechanics of Materials	(3)	29
Railroad Engineering	(2)	18
Drawing	(5)	45a
Analytical Mechanics	(2)	95
Geology	(4)	67
Religion	(2)	123
Field Work		38

SECOND TERM		
Public Speaking	(1)	118
Masonry Construction	(3)	21, 24
Trusses	(3)	30
Highway Engineering	(2)	19
Tunneling	(2)	26
Excavations	(2)	27
Drawing	(5)	45a
Metallurgy	(2)	15
Astronomy	(4)	1, 2
Religion	(2)	123
Field Work		38

SENIOR CLASS.

FIRST TERM		
Public Speaking	(1)	119
Bridges	(6)	31
Hydraulics	(2)	33
Sewers	(2)	28
Cement Laboratory	(4)	25
Design Problems	(6)	45b, 46
Economics	(2)	47
Natural Theology	(2)	109

SECOND TERM		
Public Speaking	(1)	119
Bridges	(6)	31
Contracts and Specifications	(2)	32
Railway Track and Track Work	(3)	20
Water Supply	(2)	34
Design Problems	(3)	46
Economics	(2)	47
Ethics	(2)	110, 111
Thesis	(4)	

PEDAGOGY.

The regular College work in logic and psychology satisfies the requirements of both State and City Superintendents of Public Instruction, under whose immediate direction examinations in the history of education and in method are held. Upon completing a satisfactory examination in these subjects, the candidate receives a license to teach for three years, after which period, if successful experience can be demonstrated, the provisional license may be exchanged for a life certificate.

The main requisite is that the candidate be a graduate from a college or university recognized by the Regents of the University of the State of New York, wherein at least one year was spent in pedagogical study amounting to not less than 210 hours, with attendance upon lectures or recitations, as follows: logic or psychology, at least 90 hours; history and principles of education and methods of teaching, at least 120 hours.

The courses offered to the students in Pedagogy are:

JUNIOR YEAR.—Logic, 60 hours.
History of Education and
Principles of Education, 90 hours.

SENIOR YEAR.—Psychology, 90 hours.
Method in teaching, 60 hours.
Observation, 20 hours.

HIGHER DEGREES.

Bachelors of Arts may obtain the Master's degree by pursuing an approved course of study and giving satisfactory evidence of scholarship. If such post-graduate study is not pursued in the College, the degree will not be conferred until two years after graduation.

Professional study, as such, does not entitle one to the Master's degree; but original research or special and scholarly study connected with a profession may, at the discretion of the Faculty, be accepted.

Essays, theses, and dissertations intended for the Master's degree must be presented at least one month before the end of the academic year and must contain, at least, 3,000 words. The bibliography or list of works consulted must, in each case, be appended to the thesis.

If a candidate's thesis is approved, he will be informed as to the time when he will be required to meet the Board of Examiners for any further test of his qualifications which may be deemed necessary.

Bachelors of Science in Engineering may obtain the degree of Civil Engineer one year after graduation on the presentation of an approved thesis.

COURSES OF STUDY.

FOR THE MASTER'S DEGREE.

Master of Arts.

Any one of the following courses:

1. Moral Philosophy, with written thesis, making special application of its principles to mooted questions of the day.
2. Plato or Aristotle, with the history of his influence on modern thought.
3. A comparative study of the psychology of St. Thomas Aquinas and modern psychology.
4. A comparative study of Thomistic ethical principles and current theories.
5. A critical study of Locke's influence on modern philosophy.
6. A critical study of Kantianism.
7. A critical study, with practical applications, of any *one* of the following psychologic principles as applied in teaching:

   (*a*) Interest; (*b*) Apperception; (*c*) Attention; (*d*) Personal Equation; (*e*) Imitation; (*f*) Free Will; (*g*) Character; (*h*) Humor; (*i*) Imagination.
8. A critical examination of current errors in logic, psychology, or ethics.
9. A thorough criticism of any one of the accepted texts in logic, psychology, or ethics.
10. A critical examination of any one of the accepted texts in the history of education.
11. A critical study of the growth of the novel.

12. English literature. Critical analysis of any classic author from the Catholic standpoint.
13. French literature, with translations at sight from any classic author, and a critical French essay on his work or his age.
14. German literature, with translations at sight from any classic author, and a critical German essay on his work or his age.
15. Church History. Selections of important periods for research, with essays embodying results of investigation.
16. A discussion of current theories in political economy.
17. A critical examination of any one of the texts commonly accepted as standard in political economy.
18. A detailed examination with applications of the relations of political economy to ethics.
19. A critical study of Leo XIII.'s encyclicals on political, social, and economic questions.
20. Discussion of prevalent sociological theories.
21. Amplification of topics discussed by the Catholic Truth Society.

Master of Science.

Any one of the following courses:

1. Higher co-ordinate geometry of two dimensions; co-ordinate geometry of three dimensions.
2. General theory of equations.
3. Higher parts of the integral calculus; differential equations; calculus of variations.
4. Rigid dynamics.

5. Fourier's theorem and its applications.
6. The wave theory treated mathematically or experimentally, or both.
7. The electromagnetic theory of light.
8. Phenomena of interference, diffraction and polarization.
9. Spectrum analysis.
10. The electronic theory of matter.
11. Conservation and dissipation of energy.
12. Application of the doctrine of energy to the phenomena of chemical combination.
13. Thermal measurement of energy.
14. Properties and phenomena of the ether.
15. Discharge of electricity through gases.
16. Recent views on electricity.
17. Higher parts of static and dynamic electricity.
18. Phenomena of alternating currents.
19. Astrophysics.
20. Special studies in civil engineering.
21. Special studies in electrical engineering.

These subjects are merely suggestive, and are intended to assist the candidate in the choice of a subject for his thesis. The treatment of the subject should be thorough and comprehensive, and should embody the result of original thought or of experimental investigation, as the case may require.

Published works of the candidate on the subject selected, articles in reviews or scientific periodicals, or contributions to the transactions of learned societies will receive due consideration from the Board of Examiners.

DEPARTMENTS OF INSTRUCTION.

ASTRONOMY.

1. **Descriptive Astronomy.**—The dimensions of the earth, its mass and motions. Phenomena depending on the axial and the orbital motion of the earth. Determination of the figure and magnitude of the earth. Kepler's laws and applications. Phenomena depending on change of place. Fundamental principles of celestial mechanics. Dimensions and configuration of the solar system. The sun and planets. Tides, eclipses, transits.

Young, *Manual of Astronomy.*

2. **Practical Astronomy.**—Construction, adjustment and use of the sextant, transit, spectroscope and equatorial telescope. Determination of the meridian, latitude, and local time.

BIOLOGY.

3. **Natural History of Plant Groups.**—Structure of plants and function of the various organs. Study of phanerogams and cryptogams. Histology and physiology of plants.

4. **Zoology.**—Structure of leading types of animals; function of organs; classification; economic relations; geographical distribution. Lectures, recitations, laboratory work, visits to museums.

5. **Human Anatomy and Physiology.**—Lectures, illustrated with charts, models, and lantern slides.

6. **The Nervous System and Its Terminal Organs.**—Lectures and illustrations, with charts, models, and lantern slides.

CHEMISTRY.

13. Qualitative Analysis.—Description of a method of separation which experience has proved to be sufficiently simple and accurate.

Noyes, *Qualitative Analysis.*

14. Laboratory Work.—Separation of the ordinary bases and acids.

Noyes, *Qualitative Analysis.*

15. Metallurgy of Iron and Steel.—Study of the physical and chemical properties as well as the constitution and manufacture of cast iron, wrought iron, and steel.

Stoughton, *The Metallurgy of Iron and Steel.*

CIVIL ENGINEERING.

16. Land Surveying.—Theory and general principles. Adjustment and use of instruments. Leveling. Making of profile; grading. Chain and compass surveying. Balancing, plotting, supplying omissions, and computing areas.

Tracy, *Plane Surveying.*

17. Land Surveying.—Topographical surveying by transit and stadia. Leveling, contour lines, plotting. Triangulation. Use of plane table, planimeter and sextant. Theory of simple curves, slope staking. City, hydrographic and mining surveying.

Breed & Hosmer, *Principles and Practice of Surveying.*

18. Railroad Engineering.—Reconnaissance, preliminary, and location surveys. Simple, compound, parabolic and spiral curves. Turnouts and crossings. Computation of earth work.

Allen, *Railroad Curves and Earthwork.*

Reference books: Kurtz, *Modern Location of Standard Turnouts;* Talbot, *The Railway Transition Spiral.*

19. Highway Engineering.—Preliminary Investigations. Surveying and mapping. Design, drainage, and foundations. Earth, sand-clay, gravel, and broken-stone roads. Bituminous materials and various methods for using in roads. Penetration and mining methods. Wood block, stone block, brick, and concrete pavements. Street cleaning and snow removal. Car tracks, sidewalks, bridges.

Blanchard and Drownes, *Text-book on Highway Engineering.*

20. Railway Track and Trackwork.—Roadbed construction, Ballast, Ballasting, Ties, Tie plates, Rails, Rail renewals, Rail fastenings, Rail joints, Track-laying, Switches, Frogs, Turnouts, Crossings, Sidings, Yards, Terminals, Fences, Cattleguards, Handling and clearing snow, Bridge floors, Miscellaneous structures, Tools, Supplies, Signs, Signals, Interlocking systems, Electric railways, Organization of maintenance-of-way department, Trackwork of maintenance, Gages, Grades, Curves, Drainage, Ditching, Inspection of track, Premium system, Bridge inspection, Permanent improvements, Wrecking trains, Records, Reports, Accounts.

Tratman, *Railway Track and Trackwork.*

21. Foundations.—Bearing power of soils; foundations in rock; foundations in compressible soils; reinforcing the soil with piles. Sand, wood, steel, concrete piles; pile driving and determination of the bearing power of piles. Foundations in water; cofferdams, cylinders, pneumatic caissons.

Baker, *Masonry Contruction.*

22. Materials of Construction.—Stones: quarrying, working, employment. Bricks: manufacture and employment. Production and testing of lime, hydraulic lime, and cement; mortar; concrete; timber; metals; miscellaneous materials.

23. Reinforced Concrete Construction.—Use and advantages of reinforced concrete. Properties of the materials, concrete and steel, alone and in combination. General theory of the concrete beam. Assumptions as to the distribution of stress. Flexure formulas or various kinds of beams and loadings. Testing of beams and columns. Working stresses in beams and columns. Durability of reinforced concrete. Formulas. Diagrams. Tables. Building construction. Methods of reinforcing. Continuous beams. Girders. Floors. Slabs. Arches, their advantages and methods of reinforcing them. Analysis of the arch. Calculation of thrust, shear, and moment. Temperature stresses. Retaining walls and dams, their design and the determination of stability. Miscellaneous structures, pipe and box culverts, conduits, chimneys.

Turneaure and Maurer, *Principles of Reinforced Concrete Construction.*

24. Masonry Structures.—Theory of the slope of earth embankments; graphical and analytical methods for determining earth-pressure as well as the thickness ot retaining-walls and dams. Arches. Masonry culverts and bridges.

Prelini, *Earth Slopes, Retaining Walls, and Dams.*

25. Cement and Concrete.—Portland and natural cement; raw materials, methods of manufacture, uses. Concrete, plain and reinforced. Selection of materials, proportions, methods of mixing and depositing; cost. Laboratory work in testing.

Taylor and Thompson, *Concrete, Plain and Reinforced.*

26. Tunneling.—Timbering and lining of tunnels. Excavation of tunnels through rock, and through loose and treacherous soils. Subaqueous tunnels. Open cut. Subways. Ventilation of tunnels.

Prelini, *Tunneling.*

27. Excavations.—Earthwork, excavations by hand and machine, rock excavation, hauling on horizontal and inclined roads, hoisting cableways, trench cutting, embankment constructions, dredging and dredging materials.

Prelini, *Earth and Rock Excavation.*

Prelini, *Dredges and Dredging.*

28. Sewers and Sewage Disposal.—Different sewerage systems. Amount of sewage. Run-off and storm water. Size and material of sewers. Manholes, catch basins, flushing tanks, etc. Sewage disposal by dilution. Mechanical and chemical clarification of sewage. Sewage treatment by septic tanks, contact beds, sprinkling filters, etc. Sewage disposal by irrigation.

Folwell, *Sewerage Systems.*

29. Mechanics of Materials.—Resistance and elasticity of materials, cantilever, simple and continuous beams, columns, torsion and shafts, stresses, resilience, tension and compression, flexure in beams, shear and torsion, true and apparent stresses, design and construction of beams in wood and steel, design of girders.

Merriman, *Mechanics of Materials.*

30. Theory of Trusses.—Truss elements, loads and reactions for trusses of various designs, influence lines, and position of loads for maximum bending movement. Wheel-loads and conventional systems of analysis, stress-strain diagrams, secondary stresses in trusses, applications to highway and railroad bridges.

Merriman and Jacoby, *Roofs and Bridges*. Part I. (begun.)

31. Roofs, Bridges, and Buildings.—Different classes of bridges: riveted truss bridge, lattice bridge, pin-connected bridge. Design of details for roofs and bridges, floor systems, lateral and transverse bracing. The plate girder in detail. Complete designs, with estimate of cost for structure and erection. Lectures on the design of roof trusses, plate girders and truss bridges.

Merriman and Jacoby, *Roofs and Bridges*. Part I. (completed); Part III.

32. Contracts and Specifications.—The law of contracts. General specifications; special clauses in engineering specifications. The study and draughting of complete contracts and specifications.

Johnson, *Contracts and Specifications*.

33. Hydraulics.—Flow of water through orifices and over weirs, gauging of weirs. Flow of water in canals. Formulæ for discharge of water from locks. Motion of water in pipes. System of pipes. Gauging water in rivers. Rainfall and run-off. Pumps and pumping.

Merriman, *Hydraulics*.

34. Water Supply and Irrigation.—Analysis of water. Amount of water required. Sources of supply. Gravity systems. Intakes, reservoirs, aqueducts and distributing systems. Pumping. Sedimentation. Slow sand filtration. Mechanical filtration. Ozone, hypochlorite, and other methods of purification. Water softening. Details of construction and estimates of cost. Drainage areas, rainfall, evaporation. Reservoir construction. Dams for storage. Regulators. Velocity of flow and dimensions of canals. Distributing and lateral canals.

35. Inspection Visits.—Visits to engineering works and manufacturing establishments.

36. Field Work.—Compass and transit surveys. Farm survey. Leveling, profile, grading.

37. Field Work.—Triangulation. Topographical surveying with transit and stadia. Locating contours. Simple curves.

38. Field Work.—Reconnaissance and preliminary survey of railroad. Location of line. Profile and cross-section. Computation of earth work. About two miles of road are run, and the students make all calculations required in the regular routine of office work.

DRAWING.

39. Mechanical Drawing.—Use of instruments, geometrical problems, lettering, plans, elevations.

40. Mechanical Drawing.—Elementary projections, intersections, shades and shadows. Tinting drawings, pen-and-ink sketching.

41. Drawing.—Stone-cutting and its application to culverts, sewers, etc. Tracing and blue-prints.

42. Descriptive Geometry.—Demonstrations and execution of eight plates.

Faunce, *Descriptive Geometry*.

43. Drawing.—Plots of survey, topographical maps, contour maps, profiles.

44. Graphic Statics.—Resolution of concurrent and non-concurrent forces; determination of moments, of internal stresses, of centroids and moments of inertia. Application to roofs and trusses.

Merriman and Jacoby, *Graphic Statics.*

45a. Design Problems.—Graphic solution of problems concerning the slope of embankments, earth pressure against retaining-walls and dams; stability of retaining-walls, dams and arches. Design of a masonry bridge with plan, elevation, longitudinal and cross-sections.

45b. Design Problems.—Series of plates of graphical determinations of stresses in girders and trusses.

46. Bridge Design.—Design of roof trusses and fixed steel bridges. Drawbridges. Elevated steel structures. Skeleton of a steel building. Computations and working drawings are made from specifications for railroad bridges of assigned spans, and estimates of weight prepared.

ECONOMICS, SOCIAL AND POLITICAL SCIENCE.

47. Economics.—Principles of production, distribution, exchange, money, banking, international trade-relation of labor and capital, present organization of industry, currency legislation of the United States. Economic history of England and America.

Seager, *Introduction to Economics.*

48. Principles of Government.—Legislation, the judiciary, the executive, suffrage, and finance.

Wilson, *The State.*

49. Public Finance.—Sources of state income. Development, classification, incidents and effects of principal taxes.

Adam's *Science of Finance.*

50. Representative Government in the United States and other countries.

51. Sociology.—Psychology of social types. Historical aspects of social organization, both ancient and modern. Study of modern social problems.

ENGLISH.

52. English Composition.—The principles of composition; the structure of the paragraph and the sentence; the forms of prose composition. Versification. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *Composition: Oral and Written.*

53. English Composition.—Advanced work in the forms of prose composition and in the study of prose diction. Versification. Analysis of illustrative selections. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *A College Manual of Rhetoric.*

54. Advanced Argumentation.—The principles of argumentation; analysis of arguments; study of the rules and tests of evidence; theory and practice of brief-drawing. One argumentative essay of considerable length developed from formal brief.

Baker and Huntington, *Principles of Argumentation.*

55. The Short Story.—The structure and form of the short story; assigned readings; practice in writing stories.

Albright, *The Short Story.*

56. Literary Criticism.—Study of the chief forms of literary expression; practice in construction; reports on assigned readings.

57. History of English Literature.—An outline course in the history of English and American literature, accompanied by a study of masterpieces illustrating the several literary periods.

Christian Brothers, *English Literature.*

For reading and study: *The Prologue to the Canterbury Tales*, *Richard III.*, *Twelfth Night*, *Pilgrim's Progress*, *The Rape of the Lock*, Addison's Essays, *Childe Harold*, Canto IV., *The Idylls of the King*, *The Second Spring*, *Kenilworth*, *Fabiola*, *The Marble Faun*, selections from American poetry.

58. The Drama.—The development of the drama in England, with special emphasis upon the Elizabethan drama. The following plays are read and discussed: *Everyman*, *Edward II.*, *A Midsummer Night's Dream*, *Richard II.*, *Hamlet*, *The Tempest*, *The Alchemist*, and *The Rivals.*

59. English Literature of the Seventeenth and Eighteenth Centuries.—An outline history of the literary movements from the rise of Puritanism to the opening of the nineteenth century. Study of selected works of Milton, Pope, Addison, Goldsmith, and Burke. Considerable matter assigned for private reading. Lectures, recitations, and reports.

60. English Poetry of the Nineteenth Century.—Wordsworth and his contemporaries; Tennyson, Browning, and the Victorian era; American poetry. The literary history of the period is outlined by lecture. Considerable poetry is assigned for private reading.

Brother Azarias, *Books and Reading*.

Ward, *English Poets*, Vol. IV.

61. English Prose of the Nineteenth Century.—The essayists; the development of the novel in the nineteenth century. Lectures; discussions; themes; assigned readings.

Brother Azarias, *Books and Reading*.

For reading and study: Selected essays of Newman, Lamb, De Quincey, Carlyle, and Emerson. *David Copperfield*, *The Mill on the Floss*, *Diana of the Crossways*, *Callista*, *Lorna Doone*.

62. Philosophy of Literature.—A study of the fundamental principles of literature and style; the spiritual in literature; application of the principles of literary criticism to English and American authors.

Brother Azarias, *Philosophy of Literature*.

Winchester, *Principles of Literary Criticism*.

FRENCH.

63. Intermediate.—Review of grammar; practice in speaking and writing French.

Fraser and Squair, *French Grammar;* Newson, *French Daily Life;* Bazin, *Les Oberlé;* Dumas, *La Question d'Argent;* Hugo, *Ruy Blas;* Chateaubriand, *Extraits*.

64. Advanced.—Practice in speaking and writing French.

Mansion, *French Composition;* France, *Le Livre de mon Ami;* Lamartine, *Méditations;* Coppée, *Le Luthier de Crémone*, *Le Trésor;* Rostand, *La Princesse Lointaine*.

65. Seventeenth Century.—Prose and classic drama. Bossuet, *Choix de Sermons et d'Oraisons;* Corneille, *Cinna*, *Le Cid;* Molière, *Le Misanthrope;* La Fontaine, *Fables;* Racine, *Andromaque.*

66. The History of French Literature.—The outlines of French literature. Lectures, assigned readings chiefly from authors of the eighteenth and nineteenth centuries.

Doumic, *Histoire de la Littérature Française.*

GEOLOGY.

67. General Geology.—Lectures and recitations. The following topics are discussed: Origin of the earth; external and internal processes and the land produced by them; organisms as rock makers; a brief history of the earth, organic and inorganic.

Scott, *Introduction to Geology.*

GERMAN.

69. Intermediate.—Review of grammar; prose composition; reading.

Thomas, *German Grammar;* Keller, *Kleider Machen Leute;* Hauff, *Lichtenstein;* Freytag, *Soll und Haben;* Schiller, *Wilhelm Tell;* Goethe, *Hermann und Dorothea.*

70. Advanced.—Syntax; prose composition; reading and conversation.

Thomas, *German Grammar;* Tombo, *Deutsche Reden;* Freytag, *Bilder aus der deutschen Vergangenheit;* Gore, *German Science Reader;* Heine, selections; Lessing, *Minna von Barnhelm;* Schiller, *Die Jungfrau von Orleans.*

71. The German Drama.—The classic drama; the romantic school; modern German drama. Essays in German.

The following plays will be studied in class: Lessing, *Nathan der Weise;* Goethe, *Iphigenie;* Schiller, *Maria Stuart* and *Wallenstein's Tod;* Kleist, *Prinz von Homburg;* Grillparzer, *Der Traum ein Leben;* Fulda, *Unter vier Augen.*

72. The History of German Literature.—Outlines of the history of German literature. Lectures and discussions. Reading assigned by the instructor.

Stroebe and Whitney, *Geschichte aus der deutschen Literatur;* Thomas, *German Anthology.*

HISTORY.

74. Ancient History.—History of Greece, with special reference to its literature, politics and commerce.

75. Ancient History.—Rome, from the founding of the City to the fall of the Western Roman Empire, with special reference to literature, politics and commerce.

76. Medieval History.—From the fall of the Western to the fall of the Eastern Roman Empire. The Holy Roman Empire and the Papacy receive special attention.

77. Modern History.—The principal subjects studied are the revival of learning, the age of discovery, the Reformation in England, France and Germany, the Thirty Years' War, the age of Louis XIV., the French Revolution, the nineteenth century.

80. The History of the Nineteenth Century.—This course treats principally of the restoration of the Bourbons, the Revolutions of 1830 and 1848, the Austro-Prussian war, the Franco-Prussian war, the unification of Germany and of Italy.

81. American Political Institutions.—Nature of state and national systems; organization and powers of legislative, executive, and judicial departments of Federal Government.

82. European Constitutions.—Political institutions of England and Switzerland as compared with those of the United States.

83. Constitutional History of the United States.—Colonial Governments, the confederation, the federal constitution, national vs. state sovereignty.

84. Constitutional History of the United States.—War of 1812, federal judiciary, nullification act, state constitutions, the Civil War.

85. The Philosophy of History, based principally on the works of Balmes, Schlegel and Allies.

86. Church History.—From the founding of the Church to the Protestant Reformation, based on the works of Allies, Montalembert, Mann, Janssen, and Pastor. Illustrated lectures including the history and geography of the Holy Land.

ITALIAN.

87. Elementary Course.—Grammar, composition, reading.

Marinoni, *Italian Grammar and Italian Reader;* De Amicis, *Cuore;* Manzoni, *I Promessi Sposi.*

88. Dante.—

The *Vita Nuova;* the *Divina Commedia.*

MATHEMATICS.

89. Algebra.—Advanced algebra.

Hawkes, *Advanced Algebra.*

90. Trigonometry.—Plane and spherical.

Wentworth, *Plane and Spherical Trigonometry.*

91. Analytical Geometry.—General equation of the second degree; straight line, plane, surfaces of revolution.

Nichols, *Analytical Geometry.*

92. Calculus.—Differential and integral, with application to geometry, mechanics, engineering, and physics.

Osborne, *Differential and Integral Calculus.*

MECHANICS.

94. Mechanics.—Principles of statics and dynamics.

Maurer, *Technical Mechanics*, Part I.

95. Analytical Mechanics.—Statics of concurrent and parallel forces, theory of couples, friction, mass-moments. Theorems of Guldinus. Work and energy. Impulsive forces. Angular velocity and acceleration. Simple harmonic motion. Centroids of surfaces and solids. Moments of inertia, with application to engineering problems. The conical and the ordinary pendulum. Pressure due to gravitating liquids, center of pressure, equilibrium of floating bodies.

Bowser, *Analytical Mechanics.*

Bowser, *Hydromechanics.*

PEDAGOGY.

97. Principles of Education.—The educative process. The physical, mental, and moral laws upon which education is based. Aims and ideals of Catholic education. The teacher and his qualifications. School organization, hygiene and discipline. Aids to teaching.

Harris, *Psychologic Foundations of Education;* Horne, *The Philosophy of Education;* Shields, *The Psychology of Education;* Horne, *The Psychology of Education.*

98. Methods in Teaching.—Meaning of instruction and its relation to education. The psychologic and logical views of knowledge. The psychologic basis of method. Its general principles. The function of the recitation. The conduct of the recitation.

Collar and Crook, *School Management and Methods of Instruction;* Brothers of the Christian Schools, *Elements of Practical Pedagogy;* McMurry, *Method of the Recitation.*

99. History of Education (Ancient and Medieval).—Chinese, Hindoos, Egyptians, Persians, Israelites, Greeks and Romans. Education during the Middle Ages: Monasticism, Scholasticism. The Crusades. Rise of Universities. Noted Educators.

Monroe, *Text-book in the History of Education.*

100. History of Education (Modern).—The Renaissance; Humanism; the Reformation; Catholic education; history of education in the United States.

Monroe, *Text-book in the History of Education.*

PHILOSOPHY.

101. Formal Logic.—The idea. Errors as to the nature of ideas in modern English and German philosophy. Definition. Division. The nature of judgment. The value of the syllogism.

102. Method.—General principles. Special methods. Deduction and induction. Methods of observation. Methods of explanation.

103. Critical Logic.—The possibility of certainty. Scepticism. Veracity of the senses and the intellect. Idealism vs. Realism. Universals. Authority and belief. Critical examinations of various theories of knowledge.

104. Metaphysics.—The Aristotelian transcendentals. Reality of substances. Causation. Errors concerning causation. Final causes.

105. Cosmic Philosophy.—Nature, origin, and duration of the universe. Ultimate constituents of bodies. Theory of matter and form. Laws of nature. Possibility of miracles. The concepts of natural science and scholastic philosophy.

106. Psychology.—Rational vs. experimental psychology; value of each. Faculty, habit and action. The life principle. Vegetative Life. Theory of sensation. Qualities of sensation. Intellection. Attention. Apperception. Association of Ideas. Evolutionism. Heredity. Freedom of will. Spirituality and immortality of the soul.

107. The Psychology of Education.—A study of mental development. The psychological basis of education and of methods of teaching. Refutation of prevalent errors in educational psychology.

109. Natural Theology.—Proof of God's existence and providence—Deism, pantheism, agnosticism, atheism. Existence of evil. Preservation of creatures. Divine concurrence.

110. General Ethics.—Nature of a human act. Ultimate end of human actions. Determinants of morality. Does the end justify the means? Hindrances to the perfection of a human act. The passions, habit, virtue, vice.

111. Special Ethics.—Man's rights and duties as an individual. Man's duties to God—Adoration, love, obedience. Man's duties to his neighbor as regards soul

and body. Man's duties to himself as to soul and body Suicide and duelling.

Man's rights and duties as citizen. The state. Its constituent elements. Its origin, end, scope, and limits.

Common law of nations. Peaceful relations among nations.

Ecclesiastical society. The Church—Its orgin and constitution. Its ends and limits. Its superiority to the the state. Its mission to the modern world.

112. Experimental Psychology.—Elements and general methods. Elements of mental life; sensation, feeling, conation. Experiments on the outer senses and on the association of ideas, with special application to pedagogy.

113. History of Philosophy.—Principles of the great founders of Ancient Schools; their vitality as illustrated in modern views. History of medieval philosophy. History of modern philosophy. The Neo-Scholastic movement.

Turner, *History of Philosophy*.

PHYSICS.

114. Mechanics.—Matter and energy. Kinematics; rectilinear, curvilinear, and periodic motion. Dynamics; laws of motion, work and energy, rotation, equilibrium, elasticity, machines. Mechanics of fluids; molecular phenomena in fluids, density and specific gravity, fluids in motion, properties of gases.

Light.—Laws of propagation, velocity and intensity of light. Photometry. Reflection and refraction; formation of images by mirrors and lenses. Spectrum analysis and study of optical instruments.

Heat.—Temperature and its measurement. Expansion of solids, liquids and gases. Change of state. Conduction, convection, radiation and absorption of heat. Vapor tension. Latent heat and specific heat. Relation between heat and work; energy, actual and potential.

Sound.—Production and propagation, velocity, reflection and refraction. Simple cases of resonance and interference. Intensity, pitch and quality. Transverse vibrations of strings. Longitudinal vibration of columns of air and of rods; vibrations of plates and membranes. Determination of pitch and wave-length. Doppler's principle and applications.

Electricity and Magnetism.—Fundamental phenomena of static electricity; general laws of distribution and induction. The Leyden jar and other condensers. Influence machines. Atmospheric electricity. Use of quadrant electrometer. Primary and secondary batteries; electromotive force, strength of current, division of current in a network of conductors. Ohm's law and applications. Magnetic, thermal and chemical effects of the current. Laws of electrolysis. Measurement of current and resistance. The electromagnet. Current induction, induction by magnets, the induction coil, discharge in low and high vacua. Continuous-current dynamo and motor; the alternator. The electric transmission of energy. Electric lighting. Thermo-electric currents. Telegraphy and telephony. Wireless telegraphy.

Permanent magnets and molecular theory; magnetic induction; the magnetic circuit. Comparison of magnetic fields. Theory and use of the magnetometer and dip-circle. Terrestrial magnetism and determination of the magnetic elements; magnetic charts.

Carhart, *College Physics*.

Physical Laboratory.—Study of the magnetic field due to a magnet and combination of magnets. Curve of free magnetism. Law of the inverse square. Comparison of magnetic moments. The ratio $\frac{M}{H}$ also the product $M \times H$. Determination of magnetic dip. Laying out the meridian; magnetic declination. Measurement of electromotive force, resistance of conductors, and capacity of condensers. Battery resistance and current strength. Measurements relating to storage batteries. Use of the tangent galvanometer, ammeter and voltmeter for direct and alternating currents; the wattmeter and electrodynamometer; the copper voltameter. Quantitative estimate of heat development in a circuit.

PUBLIC SPEAKING.

116. Oral Interpretation.—Drill in articulation, intonation and gesture. Practice in short declamations. Individual and class criticism.

117. Oral Interpretation.—Lectures. Drill in articulation, intonation and gesture. Choice passages from the poets and prose writers of English literature. Individual and class criticism.

118. Argumentative Oratory.—Study of the oratorical principles of argumentation. Analysis of notable arguments. Practice in debate and in extempore speaking.

119. Public Address.—Preparation and delivery of original compositions, with special reference to the occasion and timeliness of the material used. Extempore addresses.

RELIGION.

121. Dogma.—Explanation of the principal dogmas, with special insistence on the continuity of the Church. The Church and science. Objections. History of the Old Testament.

Christian Brothers' *Manual of Christian Doctrine*, Part I.

122. Moral.—Explanation of the fundamental principles of Christian morality as contained in the decalogue. History of the New Testament.

Christian Brothers' *Manual of Christian Doctrine*, Part II.

123. Worship.—Grace, prayer, and the sacraments, with special references to the Council of Trent and the tenets of Protestantism. History of the Church.

Christian Brothers' *Manual of Christian Doctrine*, Part III.

SPANISH.

124. Elementary.—Grammar, reading, composition.

Hills and Ford, *Spanish Grammar;* Ramsey, *Elementary Reader;* Alarcon, *El Capitán Veneno;* Valera, *El Pajaro Verde.*

125. Intermediate.—Reading, conversation, composition.

Ford, *Spanish Composition;* Cervantes, *Don Quijote;* Pereda, *Pedro Sánchez;* Moratin, *El Si de las Ninas.*

126. Advanced.—Composition, conversation. Calderon, *El Principe Constante; La Vida es Sueno;* Lope de Vega, *La Estrella de Sevilla.*

MANHATTAN COLLEGE HIGH SCHOOL.

The aim of the High School is to prepare for admission to college. The studies conform to the *Syllabus for Secondary Schools* of the New York State Education Department.

The requirements for admission are the preliminary studies prescribed by the Education Department. The most favorable time for entrance is at the beginning of the scholastic year. The regular examinations for admission take place on the two days immediately preceding each term.

The classes are frequently examined, and students are not allowed to pass from one subject to another until they have given evidence of adequate knowledge of the subject. A student who shows by the results of the examinations that he is unable to keep up with his class will be placed in a lower grade.

The Inspector examines weekly the record of every pupil, and comments upon it before the professors and students of the class.

Summarized reports of the examinations are forwarded to the parents at the end of each quarter.

Since each report shows the exact standing of the student, it should be carefully examined by his parent or guardian.

Percentages are rated as follows: From 90 to 100, excellent; from 80 to 90, very good; from 70 to 80, good; under 60, unsatisfactory.

Promotions are based on the joint results of the quarterly examinations and the daily marks. No student will be promoted unless he attains an average of at least 60 per cent. in each subject, and a general average of 70 per cent.

Students who fail to get the average required in any subject may present themselves for examination on the two days immediately preceding the reopening in September. A fee of one dollar is required for each subject examined.

At least three hours a day should be given to the preparation of class work.

The active co-operation of parents with the faculty is essential to the progress of the student. Parents are therefore requested to insist upon regular attendance and careful preparation of class work.

Punctuality at all sessions and recitations is required.

In all cases of absence a written excuse from parents or guardian is required. This excuse will not be accepted in lieu of omitted class work.

Wednesday and Saturday afternoons are the regular weekly half-holidays.

Students who live in the College may not leave the grounds without authorization.

COMMERCIAL DEPARTMENT.

Students who desire to prepare for mercantile life will find every facility in the Commercial Department. This department comprises two years' work, and no student is admitted until he has satisfactorily completed the studies of the *second year* of high school.

The students receive a thorough course in standard business methods and in the science of accounts. A complete course in commercial arithmetic is given, and ample opportunity is afforded for the practice of shorthand and typewriting.

The Commercial course does not, however, confine its work to purely business branches. Subjects of general culture are also included. English composition and letter-writing receive special attention. The student is required to treat prescribed subjects in a manner that will enable him to write with ease and elegance. Questions relating to political economy and commercial law are discussed in the class-room in order to give the student correct ideas on the vital questions of daily life. Weekly lessons are given in the art of public speaking, in order that the student may acquire an easy and graceful delivery.

Students who complete the Commercial course receive a certificate as a guarantee of their fitness for mercantile employment.

COURSE OF STUDY—HIGH SCHOOL.

FIRST YEAR.

ENGLISH. (5)—Hanson, *Two Years' Course in English Composition.*
Lowell, *The Vision of Sir Launfal;* Stevenson, *Treasure Island;* Coleridge, *The Ancient Mariner;* Parkman, *Oregon Trail.*

ALGEBRA. (5)—Through Quadratics.
Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Guerber, *Contes et Légendes.*

BIOLOGY. (5)—Hunter, *Elements of Biology.*

BUSINESS WRITING. (2).

DRAWING. (2)—*Syllabus for Secondary Schools*, pp. 380-384.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Dogma.*

SECOND YEAR.

ENGLISH. (3)—Hanson, *Two Years' Course in English Composition;* Irving, *Sketch Book;* Shakespeare, *Merchant of Venice;* Eliot, *Silas Marner*; Goldsmith, *The Deserted Village.*

PLANE GEOMETRY. (5)—Wentworth, *Plane Geometry.*

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* Figures in parentheses indicate the number of recitations a week.

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Daudet, *Neuf Contes Choisis;* Labiche et Martin, *La Poudre aux Yeux;* Mairet, *La Tâche du Petit Pierre.*

GERMAN. (5)—Spanhooft, *Lehrbuch der deutschen Sprache;* Holzwarth, *Grusz aus Deutschland.*

ANCIENT HISTORY. (3)—Wolfson, *Essentials in Ancient History.*

DRAWING. (2)—*Syllabus for Secondary Schools*, pp. 384-385.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Moral.*

THIRD YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric; The Sir Roger de Coverley Papers;* Shakespeare, *Henry V;* Dickens, *A Tale of Two Cities;* Tennyson, *Gareth and Lynette, Launcelot and Elaine* and *The Passing of Arthur.*

ELOCUTION. (1).

SOLID GEOMETRY (First Term). (4)—Wentworth, *Solid Geometry.*

INTERMEDIATE ALGEBRA (Second Term). (4)—Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Enault, *Le Chien du Capitaine;* Labiche, *La Grammaire;* Sarcey, *Le Siége de Paris;* Racine, *Esther.*

GERMAN. (5)—Spanhooft, *Lehrbuch;* Hillern, *Höher als die Kirche;* Schiller, *Der Neffe als Onkel;* Zschokke, *Der zerbrochene Krug;* Benedix, *Der Prozess.*

PHYSICS. (5)—Carhart and Chute, *First Principles of Physics;* Chester, Dean, Timmerman, *Laboratory Manual of Physics.*

DRAWING. (1)—*Syllabus for Secondary Schools*, pp. 385-386.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Worship.*

FOURTH YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric;* Burke, *Speech on Conciliation with America;* Miton, *L'Allegro, Il Penseroso, Comus;* Macaulay, *Life of Johnson;* Shakespeare, *Macbeth.*

ELOCUTION. (1)

TRIGONOMETRY. (2)—Wentworth, *Plane and Spherical Trigonometry.*

FRENCH. (4)—Fraser and Squair, *Shorter French Course;* Lamartine, *Jeanne d'Arc;* Hugo, *Hernani;* Racine, *Athalie.*

GERMAN. (4)—Riehl, *Der Fluch der Schönheit;* Freytag, *Die Journalisten;* Schiller, *Wilhelm Tell;* Hatfield, *German Lyrics and Ballads.*

AMERICAN HISTORY AND CIVICS. (5)—Hart, *Essentials in American History;* Boynton, *School Civics.*

CHEMISTRY. (5)—Brownlee, *First Principles of Chemistry;* Brownlee, *Laboratory Exercises.*

DRAWING. (1)—*Syllabus for Secondary Schools*, p. 386.

RELIGION. (2)—Christian Brothers' Series, No. 4. Complete.

COMMERCIAL COURSE.

For First and Second Years see pages 53 *and* 54.

THIRD YEAR.

ENGLISH. (3)—See English, p. 54.

ELOCUTION. (1)

CIVICS. (2)—See Civics, p. 56 (above).

COMMERCIAL LAW. (3)—Richardson, *Commercial Law.*

FRENCH. (5)—See French, p. 55.

or

GERMAN. (5)—See German, p. 55.

or

SPANISH. (5)—See Spanish, No. 124.

SHORTHAND. (5)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

TYPEWRITING. (2)—Smith, *A Practical Course in Touch Typewriting.*

COMMERCIAL ARITHMETIC. (4)—Moore and Miner, *Practical Business Arithmetic.*

RELIGION. (2)—See Religion, p. 55.

FOURTH YEAR.

ENGLISH. (3)—See English, p. 55.

ELOCUTION. (1)

POLITICAL ECONOMY. (3)—Laughlin, *Elements of Political Economy.*

FRENCH. (5)—See French, p. 55.

or

GERMAN. (5)—See German, p. 56.

or

SPANISH. (5)—See Spanish, No. 125.

SHORTHAND AND TYPEWRITING. (6)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

BOOKKEEPING. (5)—Montgomery, *Bookkeeping and Business Practice.*

RELIGION. (2)—See Religion, p. 56.

PRIZES AND MEDALS.

COLLEGE.

1. A purse of $50 is awarded by the Alumni Society to the best English essayist of the graduating class. The prize contest consists of two essays, one prepared and the other extemporaneous. The subject of the first is announced at the beginning of the month of October, and the essay must be presented not later than the second Tuesday of April. The subject of the second is announced when the candidates are assembled to write the essay.

2. The Milmo-McGowan Medal for religious instruction was founded by Mrs. B. McGowan, in memory of her son, Mr. Michael J. McGowan, '69. This medal is awarded on competitive examination on the subject matter of the four years' course in Christian doctrine and church history. The examination takes place at the end of May.

3. The Kelly Medal for philosophy, offered to the students of the Senior Class, was founded by the late Mr. Eugene Kelly, of New York City. This medal is awarded for proficiency in logic, metaphysics, and psychology.

4. The Grady Memorial Medal for oratory was founded by the Alumni Society in memory of Rev. John M. Grady, '69. The contest for this medal is open to all College students.

5. The Medal for the Philosophy of History, donated by the Rt. Rev. Mgr. Matthew A. Taylor, LL.D., of New York City, is awarded to the student of the Senior Class who obtains the highest average in this subject.

6. The Medal for Pedagogy is awarded to the student who obtains the highest average in this subject during Junior and Senior years.

7. The Cohalan Medal for civil engineering, the gift of Hon. Daniel F. Cohalan, LL.D., '85, in memory of his father, is awarded to the Senior student who has the highest record for the year in the civil engineering course.

8. The Develin Medal for French, founded by Mr. Charles E. Miller, of New York City, in honor of his friend, Mr. John E. Develin, is awarded by competitive examination on the matter of the four years' College course.

9. The Ridder Purse of fifty dollars for experimental physics is offered by Mr. Herman Ridder to the student of the Freshman Class who obtains the highest marks in physics during the year.

10. The Doelger Medal for German, the gift of Mrs. Doelger, in memory of the late Peter Doelger, is awarded to the student who has the highest record for the four years' College course in German.

HIGH SCHOOL.

1. The Medal for Elocution is awarded by competition among the students of the High School Department.

2. The Medal for Excellence is awarded to the pupil who has the highest general average for the fourth year of the High School course.

3. The Brother Charles Memorial Medal, donated by the Commercial Alumni Society, is awarded to the student of the Commercial Department who has the highest record for proficiency throughout the course.

4. The Kean Medal for Christian doctrine, donated by the Rt. Rev. Mgr. John J. Kean, LL.D., '66, is open to all students of the Commercial Department.

5. The Pommerer Medal, donated by William C. Pommerer, M. A., '91, is awarded to the student of the graduating class who passes the best examination in shorthand and typewriting.

COLLEGE SOCIETIES.

THE APOSTLESHIP OF PRAYER
and
LEAGUE OF THE SACRED HEART.

The Apostleship of Prayer and League of the Sacred Heart is established in the College and High School departments to foster among the students the spirit of piety, to enable them to acquire more thoroughly the spirit of Christianity, and to kindle in them zeal for works of reparation towards our Divine Lord.

The Communion of Reparation is made every first Friday, and the morning offering and daily "decade" form a part of the regular class exercises. Devotions in honor of the Sacred Heart are held in the College chapel on the first Friday of each month.

THE ARCHCONFRATERNITY OF THE HOLY INFANT JESUS.

This Archconfraternity has been erected in the chapel of the Brothers of the Christian Schools at Bethlehem. To it belong pupils of the Brothers' schools throughout the world. Its end is to obtain from Heaven through the Divine Child Jesus: 1st, That God may have the first place in all the studies in educational establishments; 2nd, that teacher and pupils may be everywhere free to observe the laws of Holy Church without any restraint whatever; 3rd, that Catholic children may not be exposed to lose their faith in schools where God is not recognized. The Archconfraternity publishes a quarterly review entitled, *Little Messenger of the Divine Infant.*

MANHATTAN COLLEGE ALUMNI SOCIETY.

The object of the Society is to keep alive among the Alumni a sentiment of affection for their Alma Mater, and to unite the graduates of successive years by a common tie of fellowship.

There are three reunions of the Society each year; at the Alumni dinner, at the Memorial Mass on Decoration day, and at the reception of the newly graduated class on Commencement day.

Officers.

President................Edward C. McParlan, '93
First Vice-President.............John E. Kiffin, '99
Second Vice-President.....Hon. Peter A. Sheil, '96
Third Vice-President.. Joseph A. Dillon, M. D., '87
Secretary................Walter T. Murphy, '09
Treasurer...............Rev. Edward J. Deevy, '05
Historian............Rev. Brother Chrysostom, '81

MANHATTAN COMMERCIAL ALUMNI SOCIETY.

The Manhattan Commercial Alumni Association was organized September 5, 1901. Two meetings are held yearly.

Officers.

President................William C. Pommerer, '91
First Vice-President.............James F. Kelly, '05
Second Vice-President..Christopher M. Leonard, '10
Secretary......................Thomas P. Hale, '12
Treasurer......................James A. Smyth, '08
Historian.................Bernard J. Kearney, '08

DE LA SALLE LITERARY SOCIETY.

This Society is confined to the students of the Senior year. The end proposed is the free discussion of questions pertaining to philosophy, which have been suggested, but not fully treated in the class-room. The Professor of Philosophy acts as Moderator.

Officers.

President	William A. Farrell
Vice-President	Joseph M. Cunningham
Secretary	Ferdinand J. Enterlin
Treasurer	Charles J. Cunningham
Critic	Rupert W. Fagan
Historian	Charles J. Cunningham

NEWMAN LITERARY SOCIETY.

The members of the Junior Class form this Society. The exercises, consisting of original essays and debates on literary or other subjects, are held weekly. The Professor of English Literature acts as Moderator.

Officers.

President	William H. Loughran
Vice-President	Lorenz J. Brosnan
Secretary	Bernard J. Farrell
Treasurer	Frederick F. Faraci
Critic	Frank X. Scanlan
Historian	Woolson F. McCormack

HUGHES LITERARY SOCIETY.

This Society consists of the students of the Sophomore year. Meetings are held twice a month, the principal exercises of which are debates on historical and scientific subjects, and on questions of the day, as well as essays on various topics. The senior Professor of the class is Moderator of the Society.

OFFICERS.

President	WILLIAM J. DWYER
Vice-President	DANIEL J. BEGLEY
Secretary	JOHN J. DUNNE
Treasurer	THOMAS V. MCENTEGART

Executive Committee: WILLIAM B. TIGUE, HARRY J. MITCHEL, FRANCIS J. DOWNING, JOHN M. KELLY

McCLOSKEY LITERARY SOCIETY.

This Society, composed of the members of the Freshman Class, holds its regular meeting on Friday afternoon. The exercises consist principally of debates on various subjects and essays on literary and historical topics. The Professor of English literature is Moderator of the Society.

OFFICERS.

President	JOHN V. O'DONNELL
Vice-President	CHARLES S. POWERS
Secretary	JAMES T. BRENNAN
Treasurer	FRANCIS NOONAN
Critic	GEORGE J. CLIFT
Historian	EDMUND D. HANNAN

CORRIGAN LITERARY SOCIETY.

The students of the Fourth Year High School have formed a literary society, which they have named after the late Archbishop of New York. They hold regular monthly meetings, and sometimes class exercises, to which the College students are invited. The senior Professor of the class acts as Moderator.

Officers.

President	Denis C. Quinn
Vice-President	William H. McCormick
Secretary	Francis J. Mahoney
Treasurer	Gerald A. Houlihan

FARLEY LITERARY SOCIETY.

This Society is composed of the Senior students of the Commercial Department. Literary exercises and discussions of questions pertaining to business and commerce constitute the program for the weekly meetings. The Principal of the Department acts as Moderator.

Officers.

President	Edmund A. O'Brien
Vice-President	Walter J. Blakemore
Secretary	Francis J. Breen
Treasurer	Percy L. Manchester

THE MANHATTAN COLLEGE ENGINEERING SOCIETY.

Membership in this Society is limited to students of engineering in the Junior and the Senior classes. Meetings are held bi-weekly, at which papers are read by students and discussed by students and instructors.

President	John G. Murphy
Vice-President	William H. Hauck
Secretary	Ferdinand J. Enterlin
Treasurer	Frederick F. Faraci
Historian	Richard D. McCann

MANHATTAN COLLEGE ATHLETIC ASSOCIATION.

President	Harry M. Bolton
Vice-President	Thomas J. Gray
Secretary	Walter J. O'Brien
Treasurer	Charles J. Cunningham
Press Agent	Raymond T. O'Connor
Manager, Baseball	Joseph M. Cunningham
Assistant Manager, Baseball	Thomas R. Owens
Manager, Basketball	Rupert W. Fagan
Assistant Manager, Basketball	Henry S. Killeen
Manager, Track	Francis A. Fritz
Assistant Manager, Track	William J. Dwyer

Committee on Athletics: Rev. Brother Matthew, Rev. Brother William, Edward A. Hanrahan, '06.

COLLEGE PUBLICATIONS.

THE MANHATTAN QUARTERLY.

The *Manhattan Quarterly* is a literary magazine published by the students of Manhattan during the months of January, April, July, and October. Its object is to encourage among the students literary composition of a high order of merit, and to serve as a link between former students of Manhattan and their Alma Mater, by keeping them in touch with the leading thought of the College and of the Alumni Society.

STAFF.

Editor-in-Chief—RUPERT W. FAGAN, '14.
Associate Editors—THOMAS D. KELLY, '14; FRANCIS A. FRITZ, '15.
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Alumni Editor—JOSÉ M. FERRER, M. D., '76.
Athletics—JOSEPH M. CUNNINGHAM, '14; THOMAS J. MCBREEN, '17.
Current Topics—WILLIAM A. FARRELL, '14;
Business Manager—ROBERT E. DUNN, '14; HARRY M. BOLTON, '14.

THE NEWS-LETTER.

The *News-Letter* was founded in 1900, mainly through the energy of Dr. José M. Ferrer, '76, and the generosity of members of the Alumni Society. It is published monthly from October to June. The chief object of the publication is to give College news, and also items of interest concerning graduates of the various departments.

REGISTER OF STUDENTS—1913-1914.

ABBOTT, JOHN G.	New York.
ADRIAN, FRANCIS M	Pleasantville, N. Y.
ADRIAN, LAWRENCE J	Pleasantville, N. Y.
BAMBRICK, CHARLES C	New York.
BARRY, RICHARD J	Long Island City, N. Y.
BARRY, BERNARD J	New York.
BEGLEY, DANIEL J	New York.
BIRMINGHAM, JOHN J	New York.
BLAKEMORE, WALTER E	New York.
BOHLIN, LESTER B	Richfield Park, N. J.
BOLTON, HENRY M	Portageville, N. Y.
BOYNE, THOMAS	Bloomfield, N. J.
BRASSEL, SAMUEL A	New York.
BREEN, FRANCIS J	New York.
BRENNAN, JAMES T	Stamford, Conn.
BROPHY, JAMES F	Yonkers, N. Y.
BROSNAN, LORENZ J	New York.
BYRNE, MICHAEL J	New York.
CAFFREY, WILLIAM J	Far Rockaway, N. Y.
CANAVAN, FRANCIS P.	New York.
CANAVAN, WILLIAM J	New York.
CAPOZZI, JOSEPH A	New York.
CARROLL, HUGH J	New York.
CAVANAGH, JAMES A	New York.
CINCOTTI, FREDERICK	New York.
CLARK, THOMAS M	Kingston, N. Y.
CLEARY, ELMER J	New York.
CLEARY, MICHAEL J	New York.
CLEARY, JOHN M	New York.
CLIFFORD, ROBERT T	New York.
CLIFT, GEORGE J	New York.
COCHRAN, FRANK W	New York.
CONNOLLY, GEORGE J	New York.
CONNORS, THOMAS J	Watertown, N. Y.
CONWAY, FRANK J	New York.
COONEY, THOMAS M	New York.
CORBALIS, CHARLES L	Yonkers, N. Y
CORBALIS, JOSEPH A	Yonkers, N. Y

COSTA, JOHN J	New York.
CREGAN, MICHAEL A	New York.
CRUISE, GERALD V	New York.
CRUISE, PHILIP J	New York.
CUNNINGHAM, CHARLES J	Dobbs Ferry, N. Y.
CUNNINGHAM, JOSEPH M	New York.
DART, CHARLES J	New York.
DEL BELLO, SYLVESTER W	Yonkers, N. Y.
DEVANNY, CHARLES J	New York.
DILLON, JOSEPH V	New York.
DILLON, VERNON S	Skaneateles, N. Y.
DODGE, CHESTER J	New York.
DOHERTY, VINCENT M	New York.
DONNELLY, JOHN J	New York.
DONOHUE, JAMES A	Yonkers, N. Y.
DONOHUE, RAYMOND A	New York.
DONOHUE, WALTER P	New York.
DORANTES, RAFAEL A	New York.
DOWNING, FRANCIS J	Buffalo, N. Y.
DRISCOLL, EUGENE J	New York.
DRISCOLL, FRANCIS X	New York.
DRISCOLL, PATRICK J	New York.
DRISCOLL, THOMAS F	New York.
DUFFY, RICHARD J	New York.
DUGAN, JOHN J	New York.
DUNN, ROBERT E	New York.
DUNN, EDWARD L	New York.
DUNNE, JOHN J	Riverdale, N. Y.
DWYER, WILLIAM J	New York.
DYKE, LEO C	New York.
ENTERLIN, FERDINAND J	New York.
FAGAN, RUPERT W	New Britain, Conn.
FARACI, FREDERICK F	New York.
FARRELL, BERNARD J	Mt. Vernon, N. Y.
FARRELL, FRANK M	East Orange, N. J.
FARRELL, WILLIAM A	New York.
FARRELL, WALTER S	New York.
FENNELLY, LEO F	New York.
FERNANDEZ, LOUIS	Cayey, Porto Rico.

FISHER, WILLIAM E	New York.
FLANAGAN, EDWARD W	Troy, N. Y.
FLOOD, JEREMIAH J	New York.
FLOR, JOHN N	Dongan Hills, S. I., N. Y.
FOLEY, EUGENE J	New York.
FRITZ, FRANCIS A	Butler, N. Y.
FRYER, JOHN F	New York.
FULLAM, MARTIN A	New York.
GALBIS, RICARDO	Cuba.
GALLAGHER, JOSEPH	New York.
GALLAGHER, THOMAS J	New York.
GALVIN, PATRICK	Lawrence, L. I., N. Y.
GAROFALO, ANTHONY R	New York.
GAROFALO, ANTHONY	New York.
GARGUILO, DEWEY J	New York.
GARLAND, GEORGE A	Mt. Vernon, N. Y.
GARVEY, JOHN L	New York.
GENTHON, RENE M	Clifton, N. J.
GILL, JOHN W	New York.
GOYA, FRANCISCO A	Santiago de Cuba.
GRADY, JAMES M	New York.
GRANAHAN, RICHARD F	New York.
GRAY, THOMAS J	New York.
GREEN, ROBERT F	New York.
GREGORY, JAMES A	New York.
GUERRA, LUIS A	Panama.
HAGAN, ALFRED F	New York.
HAGAN, LE ROY	New York.
HANNIGAN, HUBERT T	Yonkers, N. Y.
HANNAN, EDMUND D	New York.
HARVEY, GEORGE B	New York.
HAUCK, WILLIAM M	New York.
HEILMAN, LOUIS A	New York.
HOPKINS, RICHARD F	New York.
HOULIHAN, CORNELIUS T	New York.
HOULIHAN, LEO A	New York.
HOULIHAN, JAMES A	New York.
HOULIHAN, DANIEL J	New York.
HOULIHAN, GERALD A	New York.

HUBBARD, WILLIAM	Danbury, Conn.
HULSEBOSCH, LEONARD A	New York.
HURLEY, JOHN J	New York.
JOYCE, EDWIN J	Elmhurst, L. I., N. Y.
KANE, LEO J	New York.
KANE, JAMES	New York.
KASSAR, NICHOLAS G	Brooklyn, N. Y.
KAVANAGH, RICHARD A	New York.
KEANE, LAWRENCE F	New York.
KEARSING, JAMES G	New York.
KELLY, JOHN J	New York.
KELLY, JOHN M	Yonkers, N. Y.
KELLY, ARTHUR A	New York.
KELLY, THOMAS D	New York.
KELLY, WILLIAM A	Bensonhurst, L. I., N. Y.
KELLY, THOMAS F	Lowell, Mass.
KENNEDY, JOHN M	Burmont, Pa.
KENNEDY, THOMAS A	New York.
KENNEY, PETER H	New York.
KENNEY, GEORGE E	New York.
KENNEY, JOSEPH M	New York.
KILLEEN, HENRY S	Buffalo, N. Y.
LEAHY, MICHAEL J	New York.
LECLERCQ, GEORGE	Grantwood, N. J.
LEON, NARCISO	Pinar Del Rio, Cuba.
LEONARD, WALTER J	New York.
LITCHFIELD, OSCAR	New York.
LOUGHRAN, WILLIAM H., JR	New York.
LYNCH, CHARLES J	New York.
McBREEN, THOMAS J	New Brighton, N. Y.
McBRIDE, PETER F	New York.
McCANN, RICHARD D	New York.
McCARTHY, DANIEL J	New York.
McCONNELL, ARTHUR J	New York.
McCORMACK, WOOLSON F	New York.
McCORMICK, WILLIAM H	New York.
McDONALD, THOMAS J	Governors Island, N. Y.
McENERNY, DANIEL S	New York.
McENTEGART, BERNARD J	New York.

McENTEGART, JAMES A	New York.
McENTEGART, PATRICK J	New York.
McENTEGART, THOMAS V	New York.
McENTIRE, JOSEPH A	New York.
McEVOY, CHARLES A	New York.
McGEE, THOMAS J	New York.
McGINTY, CHARLES K	New York.
McMORROW, VINCENT T	New York.
McNIERNEY, EDWARD T	Newark, N. J.
MAGUIRE, PAUL J	New York.
MAHONEY, FRANCIS J	New York.
MALLEN, JOSE R	Santo Domingo.
MANCHESTER, PIERCE L	New York.
MANGAN, DANIEL C	Brooklyn, N. Y.
MANNING, JOSEPH S	New York.
MANNING, JOHN T	New York.
MARTIN, ROBERT T	New York.
MASON, PATRICK	New York.
MEEHAN, JOHN V	New York.
MICHEL, GROVER T	New York.
MITCHELL, HARRY V	New York.
MOLYNEAUX, WILLIAM E	New York.
MOORE, EDWARD F	Yonkers, N. Y.
MORAN, EDWARD J	New York.
MORGAN, THOMAS R	New York.
MURPHY, JOHN G	New York.
MURPHY, DANIEL J	Troy, N. Y.
MURRAY, HARRY A	New York.
MURRAY, JOHN T	New York.
MURRAY, JOSEPH A	Albany, N. Y.
MURRAY, THOMAS B	New York.
NIERENGARDEN, ANDREW F	New York.
NOLAN, HUGH J	New York.
NOLAN, JAMES A	Brentwood, N. J.
NOONAN, FRANCIS J	New York.
O'BRIEN, EDMUND A	New York.
O'BRIEN, WALTER J	New York.
O'BRIEN, WILLIAM J	New York.
O'BRIEN, WILLIAM F	New York.

O'CONNELL, VINCENT P	New York.
O'CONNOR, EDWARD B	Tonawanda, N. Y.
O'CONNOR, FRANK S	Manchester, N. H.
O'CONNOR, NORMAN A	New York.
O'CONNOR, JOSEPH J	New York.
O'CONNOR, THOMAS J	New York.
O'CONNOR, RAYMOND S	Percy, N. H.
O'DONNELL, JOHN P	New York.
O'DONNELL, JOHN V	New York.
O'FLYNN, CHARLES J	New York.
O'MARA, FRANCIS X	New York.
O'REILLY, JAMES V	New York.
O'REILLY, JOHN J	New York.
ORDOÑEZ, ENRIQUE B	New York.
OVALLE, RICHARD A	Panama, Panama.
OVALLE, PHILIP S	Panama, Panama.
OWENS, THOMAS R	Providence, R. I.
PENNEFATHER, ARTHUR G	New York.
PETTIT, EARL V	Cuba, N. Y.
POWER, CHARLES S	New York.
PRIAL, FRANK B	New York.
PRITCHARD, ISAAC T	Middle Granville, N. Y.
QUIGLEY, FRANCIS R	New York.
QUINLAN, THOMAS J	New York.
QUINLIVAN, JOHN F	Yonkers, N. Y.
QUINN, DANIEL J	New York.
QUINN, WILLIAM D	New York.
QUINN, WILLIAM	New York.
QUINN, ROBERT	New York.
QUINN, FRANCIS S	New York.
QUINN, DENIS C	New York.
QUINTANA, FIDEL G	Santiago de Cuba.
REID, AUGUST A	New York.
REILLY, THOMAS J	Providence, R. I.
RETALEATO, LOUIS J	New York.
REYNOLDS, FRANK J	Flushing, N. Y.
RIGNEY, HAROLD J	New York.
RILEY, HUGH J	New York.
ROBINSON, GEORGE P	New York.

ROGAN, JOHN	New York.
ROOT, SIDNEY J	New York.
RYAN, CHARLES F	New York.
RYAN, JAMES R	Hoboken, N. J.
SCALLION, WALTER V	New York.
SCANLAN, FRANCIS X	New York.
SCOCOZZA, MICHAEL	New York.
SCULLY, ALBERT F	New York.
SHEPPARD, GEORGE W	Yonkers, N. Y.
SMITH, JAMES L	New York.
SMITH, WILLIAM P	New York.
SMITH, JOHN M	New York.
SOMERS, ANDREW S	Brooklyn, N. Y.
SPINELLI, MICHAEL A	New York.
STALB, JOSEPH G	New York.
SUAREZ, JOSE	Camajuani, Cuba.
SULLIVAN, WALTER J	Brooklyn, N. Y.
SWEENEY, FRANCIS J	New York.
SWEENEY, JOHN A	New York.
TIGUE, WILLIAM B	Port Jervis, N. Y.
TIMONEY, JOHN V	New York.
VASTOLA, SAMUEL J	Buffalo, N. Y.
WALSH, JOHN J	New York.
WALSH, JOHN P	New York.
WARD, FRANK D	New York.
WARD, EDWARD J	New York.
WARD, PATRICK A	Wilkes Barre, Pa.
WATERS, JOHN A	Yonkers, N. Y.
WEIDEN, MATHIAS H	New York.
WELSH, JOHN A	New York.
WHITE, JOSEPH F	New York.
WILKS, HAMMIL V	New York.
ZIVI, FRANCIS J	New York.

SIXTIETH - - - - ANNUAL

COMMENCEMENT
of
MANHATTAN COLLEGE

Right Rev. Mgr. Michael J. Lavelle, LL.D., V. G., '73

PRESIDING

CARNEGIE HALL

Tuesday, June Seventeenth, 1913, at Eight P. M.

ORDER OF EXERCISES

OVERTURE—"Raymond" - - - - - *Thomas*

ORCHESTRA.

WORKER, WHITHER GOEST THOU

Bryan Joseph McEntegart

VOCAL QUARTET—"I Think of Thee" - - *Haertel*

MANHATTAN ALUMNI QUARTET.

SELECTION—"The Sunshine Girl" - - - *Rubens*

ORCHESTRA.

CATHOLIC ORGANIZED CHARITY

John Joseph Barrett, Jr.

(*a*) SEXTETTE from "Lucia Di Lammermoor" - *Donizetti*
(*b*) INTERMEZZO from "Cavalleria Rusticana" - *Mascagni*

ORCHESTRA.

THE TRIUMPH OF FAITH **Laurence Leo Cassidy**

VOCAL QUARTET—"In Dublin's Fair City" - *Old Irish Air*

MARCH—"Loyalty" - - - - - - *Halle*

CONFERRING OF DEGREES.

ADDRESS TO THE GRADUATES
HON. EDWARD E. MCCALL,
Chairman Public Service Commission, First District.

THE DEGREE OF BACHELOR OF ARTS

GEORGE PETER BECKER
BRYAN JOSEPH MCENTEGART
JOHN HENRY MORIARTY
WILLIAM FRANCIS LALLY
JOHN JOSEPH BARRETT, JR.
LAURENCE LEO CASSIDY
PHILIP ALOYSIUS MURPHY
WILLIAM PATRICK RYAN

THE DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

JAMES PATRICK HANLEY
EDWARD VINCENT SMYTH
DANIEL ANTHONY DRADDY
WILLIAM VALENTINE ENRIGHT
HENRY COLLINS KELLY
VINCENT PASQUALE LAURIA
CHARLES ALPHONSUS DUFFY
JOSEPH PATRICK CAREY

THE DEGREE OF CIVIL ENGINEER

WILLIAM J. DEEVY, B. S., '07
WILLIAM B. CARROLL, B. S., '11
GEORGE J. MEISE, B. S., '11
JOSEPH M. HOLAHAN, B. S., '11
JOHN T. RYAN, B. S., '11
THOMAS J. MCENTEGART, B. S., '12

THE DEGREE OF MASTER OF ARTS

JOHN FRANCIS BROSNAN

HONORARY DEGREES.

MASTER OF ARTS

PATRICK P. CURRAN, Esq.

DOCTOR OF LAWS

HONORABLE EDWARD E. MCCALL

COMMERCIAL DIPLOMAS.

Joseph Vincent Callanan
Thomas Patrick Carroll
Philip Henry Coon
Francis Joseph Curley
John Joseph Donovan
John Martin Dyer
John Joseph Harrity
Mario Avelino Hernandez
John Joseph Herold, Jr.
Walter Michael Houlihan
Anthony Aloysius Kuhnel
Joseph Aloysius Lynch
James Martin McGinity
Vincent Mañas
Pierce Aloysius Manchester
James Eugene March, Jr.
Joseph Vincent March
John Ignatius Millet
John Robert Norton
John Paul O'Donnell
John Joseph Powers
Guillermo Alvarez Riesgo
John James Ryan
Francis Dominic Ward

PRIZES.

The Alumni Purse of Fifty Dollars for the best English Essay.

BRYAN JOSEPH McENTEGART
Next in Merit, William Francis Lally
Founded by the Alumni Society of Manhattan College.

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LAURENCE LEO CASSIDY

Next in Merit, { JOHN JOSEPH BARRETT, JR.
THOMAS JAMES QUINLAN.

The Cohalan Medal for Civil Engineering (Senior Class)

JAMES PATRICK HANLEY

Next in Merit, EDWARD VINCENT SMYTH

In Memory of Mr. Timothy Cohalan

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The Doelger Medal for German

Not awarded

Donor, Mrs. Peter Doelger.

HIGH SCHOOL DEPARTMENT.

Medal for Elocution.

BERNARD JOHN MCENTEGART

Next in Merit, GEORGE JOSEPH CLIFT

Donor, Rev. Edward M. Sweeny

Rector, Church of the Ascension.

COMMERICAL DEPARTMENT.

The Brother Charles Gold Medal for General Proficiency

JOHN JOSEPH HARRITY

Next in Merit, JOHN IGNATIUS MILLET

Donor, Commercial Alumni of Manhattan College.

The Kean Medal for Christian Doctrine.

JOHN JOSEPH HARRITY

Next in Merit, JOHN IGNATIUS MILLET

Donor, Rt. Rev. Mgr. John J. Kean, LL.D., '66.

The Medal for Stenography and Typewriting.

JOSEPH ALOYSIUS LYNCH

Next in Merit, JOHN IGNATIUS MILLET

Donor, William C. Pommerer, M. A., '91.

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Manhattan College

New York

SIGNUM FIDEI

Catalogue

1915-1916

Catalogue
of
Manhattan College
and
Manhattan College High School

NEW YORK

CONDUCTED BY
The BROTHERS of the CHRISTIAN SCHOOLS

1915-1916

A.D.W.

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1915 GENERAL CALENDAR 1915

	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.		Sun.	Mon.	Tues.	Wea.	Thur.	Fri.	Sat.
Jan.	--	--	--	--	--	1	2	May	--	--	--	--	--	--	1	Sept.	--	--	--	1	2	3	4
	3	4	5	6	7	8	9		2	3	4	5	6	7	8		5	6	7	8	9	10	11
	10	11	12	13	14	15	16		9	10	11	12	13	14	15		12	13	14	15	16	17	18
	17	18	19	20	21	22	23		16	17	18	19	20	21	22		19	20	21	22	23	24	25
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Feb.	--	1	2	3	4	5	6	June	--	--	1	2	3	4	5	Oct.	--	--	--	--	--	1	2
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	14	15	16	17	18	19	20		13	14	15	16	17	18	19		10	11	12	13	14	15	16
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1916 CALENDAR 1916

	Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.		Sun.	Mon.	Tues.	Wed.	Thur.	Fri.	Sat.
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Feb.	--	--	1	2	3	4	5	June	--	--	--	--	1	2	3	Oct.	1	2	3	4	5	6	7
	6	7	8	9	10	11	12		4	5	6	7	8	9	10		8	9	10	11	12	13	14
	13	14	15	16	17	18	19		11	12	13	14	15	16	17		15	16	17	18	19	20	21
	20	21	22	23	24	25	26		18	19	20	21	22	23	24		22	23	24	25	26	27	28
	27	28	29	--	--	--	--		25	26	27	28	29	30	--		29	30	31	--	--	--	--
Mar.	--	--	--	1	2	3	4	July	--	--	--	--	--	--	1	Nov.	--	--	--	1	2	3	4
	5	6	7	8	9	10	11		2	3	4	5	6	7	8		5	6	7	8	9	10	11
	12	13	14	15	16	17	18		9	10	11	12	13	14	15		12	13	14	15	16	17	18
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Apr.	--	--	--	--	--	--	1	Aug.	--	--	1	2	3	4	5	Dec.	--	--	--	--	--	1	2
	2	3	4	5	6	7	8		6	7	8	9	10	11	12		3	4	5	6	7	8	9
	9	10	11	12	13	14	15		13	14	15	16	17	18	19		10	11	12	13	14	15	16
	16	17	18	19	20	21	22		20	21	22	23	24	25	26		17	18	19	20	21	22	23
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	30	--	--	--	--	--	--		--	--	--	--	--	--	--		31	--	--	--	--	--	--

COLLEGE CALENDAR.

1915

Sept. 6-9,	Monday-Thursday	Registration.
Sept. 10-11,	Friday-Saturday	Condition and Entrance Examinations.
Sept. 13,	Monday	Class Exercises begin.
Oct. 12,	Tuesday	Columbus Day.
Oct. 18-20,	Monday-Wednesday	Annual Retreat.
Nov. 2,	Tuesday	Election Day.
Nov. 10,	Wednesday	Quarterly Examinations, High School.
Nov. 25,	Thursday	Thanksgiving Day.
Dec. 8,	Wednesday	Immaculate Conception, Holiday.
Dec. 22,	Wednesday	Christmas Recess begins, 12 M.

1916.

Jan. 6,	Thursday	Class Exercises resumed, 9 A. M.
Jan. 24,	Monday	Examinations.
Jan. 29,	Saturday	Entrance Examinations.
Feb. 1,	Tuesday	Second Term begins.
Feb. 12,	Saturday	Lincoln Day.
Feb. 22,	Tuesday	Washington's Birthday. High School Contest in Elocution.
Mar. 26,	Sunday	Contest for the Grady Medal for Oratory.
Apr. 15,	Saturday	Quarterly Examinations, High School.
Apr. 18,	Tuesday	Easter Recess begins, 2:30 P. M.
Apr. 26,	Wednesday	Class Exercises resumed, 9 A. M.
May 15,	Monday	Feast of St. De La Salle, Holiday.
May 30,	Tuesday	Decoration Day, Services for Deceased Alumni.
June 1,	Thursday	Ascension Day, Holiday.
June 10,	Saturday	Examinations.
June 18,	Sunday	Baccalaureate Sermon.
June 20,	Tuesday	Commencement Exercises, General Meeting of the Alumni Societies.

OFFICERS OF THE COLLEGE

BROTHER GERARDUS
Chairman of Board of Trustees

BROTHER EDWARD
President

BROTHER JASPER
Registrar

BROTHER POTAMIAN
Secretary

BROTHER ANGELUS
Treasurer

HISTORY AND ORGANIZATION.

THE institution now known as Manhattan College was opened in 1849 as an academy for young men who desired advanced instruction. From its original location in Canal Street, it was transferred in 1853 to its present site, where it was known as the Academy of the Holy Infancy. In 1863, it was incorporated by the Regents of the University of the State of New York under its present title, and empowered to confer the usual academic degrees.

The College offers two departments of study, the Department of Arts and the Department of Civil Engineering. The courses in the former lead to the degrees of Bachelor of Arts and Master of Arts; in the latter, to the degrees of Bachelor of Science in Civil Engineering and Civil Engineer. The requirements for admission into both departments and the respective courses of study will be found on pages 10 and 19.

As the vernacular language and literature constitute an essential feature of a sound education, special attention is given in both departments to the study of English. The importance of the natural and experimental sciences is emphasized in the courses given in biology, physics, chemistry, and geology. These courses are of special benefit to students preparing for medical school. Of no less advantage for the prospective law student are the courses in logic and political and social science. For students who intend to embrace the teaching profession, there are offered courses in pedagogy and in the history and psychology of education.

Besides the College proper, there is a High School department. This department offers two courses—a modern language course and a business course. The former, which corresponds to the ordinary four-year high school course, prepares directly for college entrance; the latter, which offers two years of commercial work, may be elected after the completion of two years' work in a regular high school course.

In both the Collegiate and High School departments, every attention is bestowed on the moral and religious training of the student. Christian doctrine is taught in all the classes. Regular attention to religious duties is required of all students. Though the College is Catholic in its tone and teaching, non-Catholic students are received.

The Library contains nearly 11,000 volumes, and additions are regularly made to keep the general reference section abreast of modern development. In the College Reading Room, the best current periodicals are kept on file.

The College Museums offer adequate facilities for research work in zoology, botany, geology and mineralogy.

EXPENSES.

Resident Students	$350 00
Day Students, College	100 00
Day Students, High School	75 00
Luncheon at College	50 00
Use of laboratory and apparatus for any one course	10 00
Use of surveying instruments	10 00
Use of typewriter	10 00
Use of library	2 00
Music: piano, $80; mandolin, $50; violin, $50	
Graduation	10 00
Certificate	5 00
Condition examinations, each subject	2 00
Athletics (collected by the College for the Athletic Association)	5 00

For books and stationery, cash payment is required.

Payment for the half session of five months is required **in advance.**

Remittances from outside New York City are to be made by draft or by post-office order payable at Station J.

REQUIREMENTS FOR ADMISSION.

The requirements for admission conform to the standards prescribed by the Regents of the University of the State of New York.

1. **English.**—The requirements in English are based on the recommendations of the National Conference on Uniform Entrance Requirements in English.

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence and appreciation.

ENGLISH GRAMMAR AND COMPOSITION

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted efforts of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

LITERATURE

The second object is sought by means of two lists of books, headed, respectively, *Reading* and *Study*, from which may be framed a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself

with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

A, READING

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to larger freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group 1.

Books to Be Read: 1915-19

Group 1

CLASSICS IN TRANSLATION (two to be selected). The *Old Testament*, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the *Odyssey*, with the omission, if desired, of Books 1-5, 15-17; the *Iliad*, with the omission, if desired, of Books 11, 13-15, 17, 21; the *Æneid*. The *Odyssey*, *Iliad* and *Æneid* should be read in translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group 2

SHAKESPEARE (two to be selected). *Midsummer Night's Dream*, *Merchant of Venice*, *As You Like It*, *Twelfth Night*, *The Tempest*, *Romeo and Juliet*, *King John*, *Richard II*, *Richard III*, *Henry V*, *Coriolanus*, *Julius Cæsar*, *Macbeth*, *Hamlet*. (The last three plays if not chosen for study under B.)

Group 3

PROSE FICTION (two to be selected). Malory's *Morte d'Arthur* (about 100 pages); Bunyan's *Pilgrim's Progress*, Part I; Swift's *Gulliver's Travels* (voyages to Lilliput and to Brobdingnag); Defoe's *Robinson Crusoe*, Part I; Goldsmith's *Vicar of Wakefield;* Frances Burney's *Evelina ;* Scott's novels, any *one ;* Mrs. Gaskell's *Cranford ;* Kingsley's *Westward Ho !* or *Here-*

ward the Wake; Reade's *The Cloister and the Hearth;* Blackmore's *Lorna Doone;* Hughes' *Tom Brown's School Days;* Stevenson's *Treasure Island*, or *Kidnapped*, or *Master of Ballantrae;* Cooper's novels, any *one;* Poe's *Tales;* Hawthorne's *House of the Seven Gables*, or *Twice Told Tales*, or *Mosses from an Old Manse;* a collection of short stories by various standard writers.

Group 4

ESSAYS, BIOGRAPHY, ETC. (two to be selected). Addison and Steele's *Sir Roger de Coverley Papers*, or selections from the *Tatler* and *Spectator* (about 200 pages); selections from Boswell's *Life of Johnson* (about 200 pages); Franklin's *Autobiography;* selections from Irving's *Sketch Book* (about 200 pages), or *Life of Goldsmith;* Southey's *Life of Nelson;* selections from Lamb's *Essays of Elia* (about 100 pages); selections from Lockhart's *Life of Scott* (about 200 pages); Thackeray's lectures on Swift, Addison and Steele, in the *English Humorists;* Macaulay, any one of the following essays—*Lord Clive*, *Warren Hastings*, *Milton*, *Addison*, *Goldsmith*, *Frederick the Great*, *Madam d'Arblay;* selections from Trevelyan's *Life of Macaulay* (about 200 pages); Ruskin's *Sesame and Lilies*, or selections (about 150 pages); Dana's *Two Years Before the Mast;* selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, the Letter to Greeley, together with a brief memoir; Parkman's *Oregon Trail;* Thoreau's *Walden;* selected essays of Lowell (about 150 pages); Holmes' *Autocrat of the Breakfast Table;* Stevenson's *An Inland Voyage* and *Travels with a Donkey;* Huxley's *Autobiography* and selections from the *Lay Sermons*, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; a collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, Emerson, and later writers; a collection of letters by various standard writers.

Group 5

POETRY (two to be selected). Palgrave's *Golden Treasury* (*First Series*), Books 2 and 3, with special attention to Dryden, Collins, Gray, Cowper, and Burns; Palgrave's *Golden Treasury* (*First Series*), Book 4, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under B); Goldsmith's *The Traveller* and *The Deserted Village;* Pope's *The Rape of the Lock;* a collection of English and Scottish ballads; Coleridge's *The Ancient Mariner*, *Christabel*, and *Kubla Khan;* Byron's *Childe Harold*, Canto 3 or 4, and *The Prisoner of Chillon;* Scott's *The Lady of the Lake*, or *Marmion;* Macaulay's *Lays of Ancient Rome*, *The Battle of Naseby*, *The Armada*, *Ivry;* Tennyson's *The Princess*, or *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur;* Browning's *Cavalier Tunes*, *The Lost Leader*, *Good News from Ghent*, *Home Thoughts*, *Incident of the French Camp*, *Hervé Riel*, *Pheidippides*, *My Last Duchess*, *Up at a Villa*, *The Italian in England*, *The Patriot*, *The Pied Piper*, "*De Gustibus*"—, *Instans Tyrannus;* Arnold's *Sohrab and Rustum* and *The Forsaken Merman;* selections from American poetry, with special attention to Poe, Longfellow, Lowell, and Whittier.

B, STUDY

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions.

Books to Be Studied: 1915-19

Group 1

DRAMA (one to be selected). Shakespeare's *Julius Cæsar*, or *Macbeth*, or *Hamlet*.

Group 2

POETRY (one to be selected). Milton's *L'Allegro*, *Il Penseroso*, and either *Comus* or *Lycidas;* Tennyson's *The Coming of Arthur*, *The Holy Grail*, and *The Passing of Arthur;* the selections from Wordsworth, Keats, and Shelley in Palgrave's *Golden Treasury*.

Group 3

ORATORY (one to be selected). Burke's *Speech on Conciliation with America;* Macaulay's *Speeches on Copyright*, and Lincoln's *Speech at Cooper Union;* Washington's *Farewell Address* and Webster's *First Bunker Hill Oration*.

Group 4

ESSAYS (one to be selected). Carlyle's *Essay on Burns*, with a selection of Burns' poems; Macaulay's *Life of Johnson;* Emerson's *Essay on Manners*.

EXAMINATION

The examination will be divided into two parts, one of which (English 1) will be on grammar and composition, and the other (English 2) on literature.

In grammar and composition, the candidate may be asked to construe sentences, to parse individual words, and to correct mistakes in usage. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books listed above under *Reading*, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose several subjects, perhaps eight or ten, will be indicated, from which the candidate may make his own selections.

The examination in literature will include: (1) General questions designed to test such a knowledge and appreciation of literature as may be gained by fulfilling the requirements defined under *Reading* above. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but this list will not be made the basis of detailed questions. (2) More particular questions upon the content, form, and structure of the books prescribed for *Study*, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage.

2. **History.**—(a) Ancient History, and events down to 814 A. D.; (b) English History, or Mediæval and Modern History; (c) American History and Civics.

3. **Algebra.**—Wentworth, *Elementary Algebra*, or equivalent.

4. **Geometry.**—Wentworth, *Plane and Solid Geometry*, or equivalent.

5. **Plane Trigonometry.**—Wentworth, *Plane Trigonometry*, or equivalent.

6. **French.**—Grammar, sight translation, and composition based upon the following books:

De Maistre, *Voyage autour de ma Chambre;* Mairet, *La Tâche du petit Pierre;* Halévy, *L'Abbé Constantin;* Daudet, *Le Siége de Berlin*, and Merimée, *Colomba*.

7. **German.**—Grammar, sight translation and composition based upon the following books:

Hillern, *Höher als die Kirche;* Hauff, *Das Kalte Herz;* Freytag, *Die Journalisten;* Storm, *Immensee;* Benedix, *Der Prozess*.

8. **Chemistry.**—A course of at least sixty experiments made by the candidate, with note-book certified by the teacher.

9. **Physics.**—Knowledge of the general principles of physics, and their applications. Each candidate must present a note-book containing a description of at least forty experiments which he has performed.

The following will be accepted in place of French and German:

Latin.—Grammar, Allen & Greenough, or equivalent, including prosody. Cæsar, *Gallic War*, Books I-IV. Cicero, six orations. Reading at sight of a short passage of easy Latin prose. Virgil, *Æneid*, Books I-VI. Latin prose composition.

Greek.—Grammar, Goodwin, or equivalent, including prosody. Xenophon, *Anabasis*, Books I-III. Homer, *Iliad*, Books I-III. Greek prose composition.

Students presenting Latin and Greek for admission will be required to take a special course in French and German during the Freshman year, and will thereafter follow the regular program.

A certificate of the Regents of the University of the State of New York, or of approved schools, will be received in lieu of the entrance examination, provided it has been issued within the year. The candidate will, however, be examined on such branches as are not included in this certificate.

Candidates for admission must present a certificate of good character.

GENERAL REGULATIONS.

Examinations.—Examinations for admission are held at the College on the two days preceding the opening of each term.

The regular College term examinations are held during the last week of January and the second week of June.

In case of illness, or for some other equally grave cause, a student may have his examination postponed.

Students absent for more than ten per cent. of the recitations in any subject will not be allowed to take the examination in that subject. Students absent on the two days following the Thanksgiving, Christmas, or Summer recesses, without permission, will be charged with two absences for each recitation missed.

For students who fail in the regular examinations, condition examinations are held at the College on the two days preceding the opening of the first term, and also on the first day of the Christmas and Easter recesses. Students are required to pay two dollars for an examination in each subject in which they are conditioned.

Rating.—The final standing of each student in any subject is determined by his examination results and his class-marks in that subject. Seventy per cent. constitutes a pass in each subject. A statement of the numerical standing of the student in each subject is sent to the parent or guardian at the close of each term.

Promotion.—No student will be allowed to take up Freshman work whose conditions on entrance exceed one and one-half units.* All entrance conditions must be removed before the beginning of Sophomore year.

No student will be allowed to take up Sophomore work whose failures in Freshman work exceed one and one-half units. No student will be allowed to take up Junior work whose failures exceed one unit in the work of the two previous years. No student will be allowed to take up Senior work who has any conditions.

Studies.—The studies of the course in civil engineering are prescribed throughout. In the Arts course, Freshman and Sophomore work is prescribed, and electives are offered in the Junior and Senior years. No elective course will be given unless there is a sufficient number of applicants.

Degrees.—Every candidate for a degree is required to present a typewritten thesis on a subject connected with his course. The subject selected must be submitted for approval to the Professor of the department to which it belongs, on or before February 1. Such help and guidance may be offered the candidate as the Professor may judge right, and the completed thesis shall be handed in for approval on or before May 30.

Theses in the Arts Department shall contain not less than two thousand words, and must be typewritten on paper 13x8, with a margin of an inch and one-half. Science theses must be accompanied by the necessary drawings and illustrations. All approved theses become the property of the College and are placed in charge of the Librarian.

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* A unit is five recitations a week for one year in any subject. Two hours of laboratory work or two hours of drawing are equivalent to one hour's recitation.

If a student fail to present his thesis, or if the thesis be rejected, he shall not be recommended for his degree.

At the discretion of the Faculty, a certificate of proficiency may be given to a student who has followed, under the direction of the Faculty, a special course of one or more subjects, and who gives evidence of satisfactory proficiency.

Honors.—Students who attain an average of ninety per cent. in all the subjects of their College course, will be graduated with *Honor*. They will be graduated with *Credit* if they attain an average of from eighty-five to ninety per cent. in all the subjects of their College course.

COURSE OF STUDY.

ARTS DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	52, 57	ENGLISH	(5)	52, 57
PUBLIC SPEAKING	(1)	116	PUBLIC SPEAKING	(1)	116
FRENCH	(4)	63	FRENCH	(4)	63
GERMAN	(4)	69	GERMAN	(4)	69
HISTORY	(3)	74	HISTORY	(3)	75
MATHEMATICS	(3)	90	MATHEMATICS	(3)	89
PHYSICS	(2)	114	PHYSICS	(2)	115
PHYSICAL LABORATORY	(2)		PHYSICAL LABORATORY	(2)	
RELIGION	(2)	121	RELIGION	(2)	121

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	53, 58	ENGLISH	(5)	53, 59
PUBLIC SPEAKING	(1)	117	PUBLIC SPEAKING	(1)	117
FRENCH	(4)	64	FRENCH	(4)	64
GERMAN	(4)	70	GERMAN	(4)	70
HISTORY	(3)	76	HISTORY	(3)	77
CHEMISTRY	(1)	13	CHEMISTRY	(1)	13
CHEMICAL LABORATORY	(3)	14	CHEMICAL LABORATORY	(3)	14
RELIGION	(2)	122	RELIGION	(2)	122

The figures in parentheses indicate the number of hours a week; the others indicate the paragraphs in which the course is outlined.

JUNIOR CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	54, 60	ENGLISH	(5)	55, 61
PUBLIC SPEAKING	(1)	118	PUBLIC SPEAKING	(1)	118
FRENCH	(3)	65	FRENCH	(3)	65
GERMAN	(3)	71	GERMAN	(3)	71
PHILOSOPHY	(4)	101, 102	PHILOSOPHY	(4)	106, 112
GEOLOGY	(4)	67	ASTRONOMY	(4)	1, 2
ECONOMICS	(2)	47	ECONOMICS	(2)	47
RELIGION	(2)	123	RELIGION	(2)	123

ELECTIVES.

FIRST TERM			SECOND TERM		
PEDAGOGY	(3)	97, 99	PEDAGOGY	(3)	97, 99
BIOLOGY	(4)	3	BIOLOGY	(4)	4
SPANISH	(3)	124	SPANISH	(3)	124
ITALIAN	(3)	87	ITALIAN	(3)	87
AMERICAN POLITICAL INSTITUTIONS	(1)	81	EUROPEAN CONSTITUTIONS	(1)	82
CHURCH HISTORY	(1)	86	CHURCH HISTORY	(1)	86

SENIOR CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(4)	56, 62	ENGLISH	(4)	56, 62
PUBLIC SPEAKING	(1)	119	PUBLIC SPEAKING	(1)	119
FRENCH	(2)	66	FRENCH	(2)	66
GERMAN	(2)	72	GERMAN	(2)	72
HISTORY OF PHILOSOPHY	(2)	113	HISTORY OF PHILOSOPHY	(2)	113
PHILOSOPHY	(4)	104, 105	PHILOSOPHY	(4)	103
PHILOSOPHY OF HISTORY	(2)	85	PHILOSOPHY OF HISTORY	(2)	85
NATURAL THEOLOGY	(2)	109	ETHICS	(2)	110, 111

ELECTIVES.

FIRST TERM			SECOND TERM		
PEDAGOGY	(3)	98	PEDAGOGY	(3)	98
BIOLOGY	(2)	5	PSYCHOLOGY OF EDUCATION	(1)	107
SPANISH	(2)	125	BIOLOGY	(2)	6
ITALIAN	(2)	88	SPANISH	(2)	125
PRINCIPLES OF GOVERNMENT	(3)	48	ITALIAN	(2)	88
PUBLIC FINANCE	(2)	49	SOCIOLOGY	(3)	51
AMERICAN HISTORY	(2)	83	REPRESENTATIVE GOVERNMENT	(2)	50
HISTORY OF THE 19TH CENTURY	(1)	80	AMERICAN HISTORY	(2)	84
			HISTORY OF THE 19TH CENTURY	(1)	80

COURSE OF STUDY.

CIVIL ENGINEERING DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
English	(2)	52	English	(2)	52
Public Speaking	(1)	116	Public Speaking	(1)	116
Mathematics	(6)	90, 91	Mathematics	(6)	89, 91
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Surveying	(3)	16	Surveying	(3)	16
Descriptive Geometry	(2)	42	Descriptive Geometry	(2)	42
Drawing	(4)	39, 40	Drawing	(4)	39, 40
Religion	(2)	121	Religion	(2)	121

Summer Field Work, Three Weeks, 36

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
English	(2)	53	English	(2)	53
Public Speaking	(1)	117	Public Speaking	(1)	117
Mathematics	(3)	92	Mathematics	(3)	92
Mechanics	(3)	94	Mechanics	(3)	94
Materials of Construction	(2)	22	Materials of Construction	(2)	22
Chemistry	(1)	13	Chemistry	(1)	13
Chemical Laboratory	(3)	14	Chemical Laboratory	(3)	14
Drawing	(6)	41, 43	Surveying	(2)	17
Surveying	(3)	17	Graphic Statics	(2)	44
Religion	(2)	122	Drawing	(4)	41, 43
			Religion	(2)	122

Summer Field Work, Three Weeks, 37

JUNIOR CLASS.

FIRST TERM			SECOND TERM		
Philosophy	(2)	100	Philosophy	(2)	100
English	(2)	54	Public Speaking	(1)	118
Public Speaking	(1)	118	Masonry Construction	(2)	21, 24
Masonry Construction	(2)	21, 24	Trusses	(3)	30
Mechanics of Materials	(3)	29	Highway Engineering	(2)	19
Railroad Engineering	(2)	18	Tunneling	(2)	26
Drawing	(5)	45a	Excavations	(2)	27
Analytical Mechanics	(2)	95	Drawing	(5)	45a
Geology	(4)	67	Metallurgy	(2)	15
			Astronomy	(4)	1, 2
Religion	(2)	123	Religion	(2)	123
Field Work		38	Field Work		38

SENIOR CLASS.

FIRST TERM			SECOND TERM		
Public Speaking	(1)	119	Public Speaking	(1)	119
Bridges	(6)	31	Bridges	(6)	31
Hydraulics	(2)	33	Contracts and Specifications	(1)	32
Sewers	(2)	28	Railway Track and Track Work	(3)	20
Cement Laboratory	(4)	25	Water Supply	(2)	34
Design Problems	(6)	45b, 46	Design Problems	(3)	46
Economics	(2)	47	Economics	(2)	47
Natural Theology	(2)	109	Ethics	(2)	110, 111
			Thesis	(4)	

PEDAGOGY.

The regular College work in logic and psychology satisfies the requirements of both State and City Superintendents of Public Instruction, under whose immediate direction examinations in the history of education and in method are held. Upon completing a satisfactory examination in these subjects, the candidate receives a license to teach for three years, after which period, if successful experience can be demonstrated, the provisional license may be exchanged for a life certificate.

The main requisite is that the candidate be a graduate from a college or university recognized by the Regents of the University of the State of New York, wherein at least one year was spent in pedagogical study amounting to not less than 210 hours, with attendance upon lectures or recitations, as follows: logic or psychology, at least 90 hours; history and principles of education and methods of teaching, at least 120 hours.

The courses offered to the students in Pedagogy are:

Junior Year.—Logic, 60 hours.
Psychology, 90 hours.
History of Education and
Principles of Education, 90 hours.
Senior Year.—Method in teaching, 60 hours.
Observation, 20 hours.

HIGHER DEGREES.

Bachelors of Arts may obtain the Master's degree by pursuing an approved course of study and giving satisfactory evidence of scholarship. If such post-graduate study is not pursued in the College, the degree will not be conferred until two years after graduation.

Professional study, as such, does not entitle one to the Master's degree; but original research or special and scholarly study connected with a profession may, at the discretion of the Faculty, be accepted.

Essays, theses, and dissertations intended for the Master's degree must be presented at least one month before the end of the academic year and must contain, at least, 3,000 words. The bibliography or list of works consulted must, in each case, be appended to the thesis.

If a candidate's thesis is approved, he will be informed as to the time when he will be required to meet the Board of Examiners for any further test of his qualifications which may be deemed necessary.

Bachelors of Science in Engineering may obtain the degree of Civil Engineer one year after graduation on the presentation of an approved thesis.

COURSES OF STUDY.

FOR THE MASTER'S DEGREE.

Master of Arts.

Any one of the following courses:

1. Moral Philosophy, with written thesis, making special application of its principles to mooted questions of the day.
2. Plato or Aristotle, with the history of his influence on modern thought.
3. A comparative study of the psychology of St. Thomas Aquinas and modern psychology.
4. A comparative study of Thomistic ethical principles and current theories.
5. A critical study of Locke's influence on modern philosophy.
6. A critical study of Kantianism.
7. A critical study, with practical applications, of any *one* of the following psychologic principles as applied in teaching:

   (*a*) Interest; (*b*) Apperception; (*c*) Attention; (*d*) Personal Equation; (*e*) Imitation; (*f*) Free Will; (*g*) Character; (*h*) Humor; (*i*) Imagination.
8. A critical examination of current errors in logic, psychology, or ethics.
9. A thoro criticism of any one of the accepted texts in logic, psychology, or ethics.
10. A critical examination of any one of the accepted texts in the history of education.
11. A critical study of the growth of the novel.

12. English literature. Critical analysis of any classic author from the Catholic standpoint.
13. French literature, with translations at sight from any classic author, and a critical French essay on his work or his age.
14. German literature, with translations at sight from any classic author, and a critical German essay on his work or his age.
15. Church History. Selections of important periods for research, with essays embodying results of investigation.
16. A discussion of current theories in political economy.
17. A critical examination of any one of the texts commonly accepted as standard in political economy.
18. A detailed examination with applications of the relations of political economy to ethics.
19. A critical study of Leo XIII.'s encyclicals on political, social, and economic questions.
20. Discussion of prevalent sociological theories.
21. Amplification of topics discussed by the Catholic Truth Society.

Master of Science.

Any one of the following courses:

1. Higher co-ordinate geometry of two dimensions; co-ordinate geometry of three dimensions.
2. General theory of equations.
3. Higher parts of the integral calculus; differential equations; calculus of variations.
4. Rigid dynamics.

5. Fourier's theorem and its applications.
6. The wave theory treated mathematically or experimentally, or both.
7. The electromagnetic theory of light.
8. Phenomena of interference, diffraction and polarization.
9. Spectrum analysis.
10. The electronic theory of matter.
11. Conservation and dissipation of energy.
12. Application of the doctrine of energy to the phenomena of chemical combination.
13. Thermal measurement of energy.
14. Properties and phenomena of the ether.
15. Discharge of electricity through gases.
16. Recent views on electricity.
17. Higher parts of static and dynamic electricity.
18. Phenomena of alternating currents.
19. Astrophysics.
20. Special studies in civil engineering.
21. Special studies in electrical engineering.

These subjects are merely suggestive, and are intended to assist the candidate in the choice of a subject for his thesis. The treatment of the subject should be thoro and comprehensive, and should embody the result of original thought or of experimental investigation, as the case may require.

Published works of the candidate on the subject selected, articles in reviews or scientific periodicals, or contributions to the transactions of learned societies will receive due consideration from the Board of Examiners.

DEPARTMENTS OF INSTRUCTION.

ASTRONOMY.

1. **Descriptive Astronomy.**—The dimensions of the earth, its mass and motions. Phenomena depending on the axial and the orbital motion of the earth. Determination of the figure and magnitude of the earth. Kepler's laws and applications. Phenomena depending on change of place. Fundamental principles of celestial mechanics. Dimensions and configuration of the solar system. The sun and planets. Tides, eclipses, transits.

Young, *Manual of Astronomy*.

2. **Practical Astronomy.**—Construction, adjustment and use of the sextant, transit, spectroscope and equatorial telescope. Determination of the meridian, latitude, and local time.

BIOLOGY.

3. **Plant Biology.**—The life histories of typical species of plant life are observed and discussed in the laboratory and lectures. Principles governing the growth and development of the thallophytes, bryophytes, pteridophytes and sphermatophytes are emphasized. As much of the morphology of these plants as is necessary for a proper understanding of life functions is reviewed. The algæ, fungi, moss, fern, pine, corn, and a flowering plant are studied in detail.

Hall and Bergen, *Principles of Botany*.

4. **Animal Biology.**—The study by lecture and laboratory of important types of the principal phyla of the animal kingdom. The amœba, euglena, paramœcium, grantia, hydra, starfish, earthworm, crayfish, honey-bee,

spider, locust, frog, and fish are studied in detail. The comparative structure of the birds and mammals, and adaptation to environment, are observed and discussed. Biologic principles and theories are treated from the historical and critical viewpoints. Emphasis is laid upon the economic importance of the more prominent species.

Osborne, *Economic Zoology*.

5. Human Anatomy and Physiology.—Lectures, illustrated with charts, models, and lantern slides.

6. The Nervous System and Its Terminal Organs.—Lectures and illustrations, with charts, models, and lantern slides.

CHEMISTRY.

13. Qualitative Analysis.—Description of a method of separation which experience has proved to be sufficiently simple and accurate.

Noyes, *Qualitative Analysis*.

14. Laboratory Work.—Separation of the ordinary bases and acids.

Noyes, *Qualitative Analysis*.

15. Metallurgy of Iron and Steel.—Study of the physical and chemical properties as well as the constitution and manufacture of cast iron, wrought iron, and steel.

Stoughton, *The Metallurgy of Iron and Steel*.

CIVIL ENGINEERING.

16. Land Surveying.—Theory and general principles. Adjustment and use of instruments. Leveling. Making of profile; grading. Chain and compass surveying. Balancing, plotting, supplying omissions, and computing areas.

Tracy, *Plane Surveying.*

17. Land Surveying.—Topographical surveying by transit and stadia. Leveling, contour lines, plotting. Triangulation. Use of plane table, planimeter and sextant. Theory of simple curves, slope staking. City, hydrographic and mining surveying.

Breed and Hosmer, *Principles and Practice of Surveying.*

18. Railroad Engineering.—Reconnaissance, preliminary, and location surveys. Simple, compound, parabolic and spiral curves. Turnouts and crossings. Computation of earth work.

Allen, *Railroad Curves and Earthwork.*

Reference books: Kurtz, *Modern Location of Standard Turnouts;* Talbot, *The Railway Transition Spiral.*

19. Highway Engineering.—Preliminary Investigations. Surveying and mapping. Design, drainage, and foundations. Earth, sand-clay, gravel, and broken-stone roads. Bituminous materials and various methods for using in roads. Penetration and mining methods. Wood block, stone block, brick, and concrete pavements. Street cleaning and snow removal. Car tracks, sidewalks, bridges.

Blanchard and Drownes, *Text-book on Highway Engineering.*

20. Railway Track and Trackwork.—Roadbed construction, Ballast, Ballasting, Ties, Tie plates, Rails, Rail renewals, Rail fastenings, Rail joints, Track-laying, Switches, Frogs, Turnouts, Crossings, Sidings, Yards, Terminals, Fences, Cattleguards, Handling and clearing snow, Bridge floors, Miscellaneous structures, Tools, Supplies, Signs, Signals, Interlocking systems, Electric railways, Organization of maintenance-of-way department, Trackwork of maintenance, Gages, Grades, Curves, Drainage, Ditching, Inspection of track, Premium system, Bridge inspection, Permanent improvements, Wrecking trains, Records, Reports, Accounts.

Tratman, *Railway Track and Trackwork.*

21. Foundations.—Bearing power of soils; foundations in rock; foundations in compressible soils; reinforcing the soil with piles. Sand, wood, steel, concrete piles; pile driving and determination of the bearing power of piles. Foundations in water; cofferdams, cylinders, pneumatic caissons.

Baker, *Masonry Contruction.*

22. Materials of Construction.—Stones: quarrying, working, employment. Bricks: manufacture and employment. Production and testing of lime, hydraulic lime, and cement; mortar; concrete; timber; metals; miscellaneous materials.

23. Reinforced Concrete Construction.—Use and advantages of reinforced concrete. Properties of the materials, concrete and steel, alone and in combination. General theory of the concrete beam. Assumptions as to the distribution of stress. Flexure formulas or various kinds of beams and loadings. Testing of beams and columns. Working stresses in beams and columns. Durability of reinforced concrete. Formulas. Diagrams. Tables. Building construction. Methods of reinforcing. Continuous beams. Girders. Floors. Slabs. Arches, their advantages and methods of reinforcing them. Analysis of the arch. Calculation of thrust, shear, and moment. Temperature stresses. Retaining walls and dams, their design and the determination of stability. Miscellaneous structures, pipe and box culverts, conduits, chimneys.

Turneaure and Maurer, *Principles of Reinforced Concrete Construction*.

24. Masonry Structures.—Theory of the slope of earth embankments; graphical and analytical methods for determining earth-pressure as well as the thickness of retaining-walls and dams. Arches. Masonry culverts and bridges.

Prelini, *Earth Slopes, Retaining Walls, and Dams*.

25. Cement and Concrete.—Portland and natural cement; raw materials, methods of manufacture, uses. Concrete, plain and reinforced. Selection of materials, proportions, methods of mixing and depositing; cost. Laboratory work in testing.

Taylor and Thompson, *Concrete, Plain and Reinforced*.

26. Tunneling.—Timbering and lining of tunnels. Excavation of tunnels through rock, and through loose and treacherous soils. Subaqueous tunnels. Open cut. Subways. Ventilation of tunnels.

Prelini, *Tunneling*.

27. Excavations.—Earthwork, excavations by hand and machine, rock excavation, hauling on horizontal and inclined roads, hoisting cableways, trench cutting, embankment constructions, dredging and dredging materials.

Prelini, *Earth and Rock Excavation*.

Prelini, *Dredges and Dredging*.

28. Sewers and Sewage Disposal.—Different sewerage systems. Amount of sewage. Run-off and storm water. Size and material of sewers. Manholes, catch basins, flushing tanks, etc. Sewage disposal by dilution. Mechanical and chemical clarification of sewage. Sewage treatment by septic tanks, contact beds, sprinkling filters, etc. Sewage disposal by irrigation.

Folwell, *Sewerage Systems.*

29. Mechanics of Materials.—Resistance and elasticity of materials, cantilever, simple and continuous beams, columns, torsion and shafts, stresses, resilience, tension and compression, flexure in beams, shear and torsion, true and apparent stresses, design and construction of beams in wood and steel, design of girders.

Merriman, *Mechanics of Materials.*

30. Theory of Trusses.—Truss elements, loads and reactions for trusses of various designs, influence lines, and position of loads for maximum bending movement. Wheel-loads and conventional systems of analysis, stress-strain diagrams, secondary stresses in trusses, applications to highway and railroad bridges.

Merriman and Jacoby, *Roofs and Bridges.* Part I. (begun.)

31. Roofs, Bridges, and Buildings.—Different classes of bridges: riveted truss bridge, lattice bridge, pin-connected bridge. Design of details for roofs and bridges, floor systems, lateral and transverse bracing. The plate girder in detail. Complete designs, with estimate of cost for structure and erection. Lectures on the design of roof trusses, plate girders and truss bridges.

Merriman and Jacoby, *Roofs and Bridges.* Part I. (completed); Part III.

32. Contracts and Specifications.—The law of contracts. General specifications; special clauses in engineering specifications. The study and draughting of complete contracts and specifications.

Johnson, *Contracts and Specifications.*

33. Hydraulics.—Flow of water through orifices and over weirs, gauging of weirs. Flow of water in canals. Formulæ for discharge of water from locks. Motion of water in pipes. System of pipes. Gauging water in rivers. Rainfall and run-off. Pumps and pumping.

Merriman, *Hydraulics.*

34. Water Supply and Irrigation.—Analysis of water. Amount of water required. Sources of supply. Gravity systems. Intakes, reservoirs, aqueducts and distributing systems. Pumping. Sedimentation. Slow sand filtration. Mechanical filtration. Ozone, hypochlorite, and other methods of purification. Water softening. Details of construction and estimates of cost. Drainage areas, rainfall, evaporation. Reservoir construction. Dams for storage. Regulators. Velocity of flow and dimensions of canals. Distributing and lateral canals.

35. Inspection Visits.—Visits to engineering works and manufacturing establishments.

36. Field Work.—Compass and transit surveys. Farm survey. Leveling, profile, grading.

37. Field Work.—Triangulation. Topographical surveying with transit and stadia. Locating contours. Simple curves.

38. Field Work.—Reconnaissance and preliminary survey of railroad. Location of line. Profile and cross-section. Computation of earth work. About two miles of road are run, and the students make all calculations required in the regular routine of office work.

DRAWING.

39. Mechanical Drawing.—Use of instruments, geometrical problems, lettering, plans, elevations

40. Mechanical Drawing.—Elementary projections, intersections, shades and shadows. Tinting drawings, pen-and-ink sketching.

41. Drawing.—Stone-cutting and its application to culverts, sewers, etc. Tracing and blue-prints.

42. Descriptive Geometry.—Demonstrations and execution of eight plates.

Faunce, *Descriptive Geometry*.

43. Drawing.—Plots of survey, topographical maps, contour maps, profiles.

44. Graphic Statics.—Resolution of concurrent and non-concurrent forces; determination of moments, of internal stresses, of centroids and moments of inertia. Application to roofs and trusses.

Merriman and Jacoby, *Graphic Statics*.

45a. Design Problems.—Graphic solution of problems concerning the slope of embankments, earth pressure against retaining-walls and dams; stability of retaining-walls, dams and arches. Design of a masonry bridge with plan, elevation, longitudinal and cross-sections.

45b. Design Problems.—Series of plates of graphical determinations of stresses in girders and trusses.

46. Bridge Design.—Design of roof trusses and fixed steel bridges. Drawbridges. Elevated steel structures. Skeleton of a steel building. Computations and working drawings are made from specifications for railroad bridges of assigned spans, and estimates of weight prepared.

ECONOMICS, SOCIAL AND POLITICAL SCIENCE.

47. Economics.—Principles of production, distribution, exchange, money, banking, international trade-relation of labor and capital, present organization of industry, currency legislation of the United States. Economic history of England and America.

Seager, *Economics, Briefer Course.*

48. Principles of Government.—Legislation, the judiciary, the executive, suffrage, and finance.

Wilson, *The State.*

49. Public Finance.—Sources of state income. Development, classification, incidents and effects of principal taxes.

Adam's *Science of Finance.*

50. Representative Government in the United States and other countries.

51. Sociology.—Psychology of social types. Historical aspects of social organization, both ancient and modern. Study of modern social problems.

ENGLISH.

52. English Composition.—The principles of composition; the structure of the paragraph and the sentence; the forms of prose composition. Versification. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *Composition: Oral and Written.*

53. English Composition.—Advanced work in the forms of prose composition and in the study of prose diction. Versification. Analysis of illustrative selections. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *A College Manual of Rhetoric.*

54. Advanced Argumentation.—The principles of argumentation; analysis of arguments; study of the rules and tests of evidence; theory and practice of brief-drawing. One argumentative essay of considerable length developed from formal brief.

Baker and Huntington, *Principles of Argumentation.*

55. The Short Story.—The structure and form of the short story; assigned readings; practice in writing stories.

Albright, *The Short Story.*

56. Literary Criticism.—Study of the chief forms of literary expression; practice in construction; reports on assigned readings.

57. History of English Literature.—An outline course in the history of English and American literature, accompanied by a study of masterpieces illustrating the several literary periods.

Christian Brothers, *English Literature.*

For reading and study: *The Prologue to the Canterbury Tales*, *Richard III.*, *Twelfth Night*, *Pilgrim's Progress*, *The Rape of the Lock*, Addison's Essays, *Childe Harold*, Canto IV., *The Idylls of the King*, *The Second Spring*, *Kenilworth*, *Fabiola*, *The Marble Faun*, selections from American poetry.

58. The Drama.—The development of the drama in England, with special emphasis upon the Elizabethan drama. The following plays are read and discussed: *Everyman*, *Edward II.*, *A Midsummer Night's Dream*, *Richard II.*, *Hamlet*, *The Tempest*, *The Alchemist*, and *The Rivals*.

59. English Literature of the Seventeenth and Eighteenth Centuries.—An outline history of the literary movements from the rise of Puritanism to the opening of the nineteenth century. Study of selected works of Milton, Pope, Addison, Goldsmith, and Burke. Considerable matter assigned for private reading. Lectures, recitations, and reports.

60. English Poetry of the Nineteenth Century.—Wordsworth and his contemporaries; Tennyson, Browning, and the Victorian era; American poetry. The literary history of the period is outlined by lecture. Considerable poetry is assigned for private reading.

Brother Azarias, *Books and Reading*.

Ward, *English Poets*, Vol. IV.

61. English Prose of the Nineteenth Century.—The essayists; the development of the novel in the nineteenth century. Lectures; discussions; themes; assigned readings.

Brother Azarias, *Books and Reading*.

For reading and study: Selected essays of Newman, Lamb, De Quincey, Carlyle, and Emerson. *David Copperfield*, *The Mill on the Floss*, *Diana of the Crossways*, *Callista*, *Lorna Doone*.

62. Philosophy of Literature.—A study of the fundamental principles of literature and style; the spiritual in literature; application of the principles of literary criticism to English and American authors.

Brother Azarias, *Philosophy of Literature*.

Winchester, *Principles of Literary Criticism*.

FRENCH.

63. Intermediate.—Review of grammar; practice in speaking and writing French.

Fraser and Squair, *French Grammar;* Newson, *French Daily Life;* Bazin, *Les Oberlé;* Dumas, *La Question d'Argent;* Hugo, *Ruy Blas;* Chateaubriand, *Extraits.*

64. Advanced.—Practice in speaking and writing French.

Mansion, *French Composition;* France, *Le Livre de mon Ami;* Lamartine, *Méditations;* Coppée, *Le Luthier de Crémone*, *Le Trésor;* Rostand, *La Princesse Lointaine.*

65. Seventeenth Century.—Prose and classic drama. Bossuet, *Choix de Sermons et d'Oraisons;* Corneille, *Cinna*, *Le Cid;* Molière, *Le Misanthrope;* La Fontaine, *Fables;* Racine, *Andromaque.*

66. The History of French Literature.—The outlines of French literature. Lectures, assigned readings chiefly from authors of the eighteenth and nineteenth centuries.

Doumic, *Histoire de la Littérature Française.*

GEOLOGY.

67. General Geology.—Lectures and recitations. The following topics are discussed: Origin of the earth; external and internal processes and the land produced by them; organisms as rock makers; a brief history of the earth, organic and inorganic.

Scott, *Introduction to Geology.*

GERMAN.

69. Intermediate.—Review of grammar; prose composition; reading.

Thomas, *German Grammar;* Keller, *Kleider Machen*

Leute; Hauff, *Lichtenstein;* Freytag, *Soll und Haben;* Schiller, *Wilhelm Tell;* Goethe, *Hermann und Dorothea.*

70. Advanced.—Syntax; prose composition; reading and conversation.

Thomas, *German Grammar;* Tombo, *Deutsche Reden;* Freytag, *Bilder aus der deutschen Vergangenheit;* Gore, *German Science Reader;* Heine, selections; Lessing, *Minna von Barnhelm;* Schiller, *Die Jungfrau von Orleans.*

71. The German Drama.—The classic drama; the romantic school; modern German drama. Essays in German.

The following plays will be studied in class: Lessing, *Nathan der Weise;* Goethe, *Iphigenie;* Schiller, *Maria Stuart* and *Wallenstein's Tod;* Kleist, *Prinz von Homburg;* Grillparzer, *Der Traum ein Leben;* Fulda, *Unter vier Augen.*

72. The History of German Literature.—Outlines of the history of German literature. Lectures and discussions. Reading assigned by the instructor.

Stroebe and Whitney, *Geschichte aus der deutschen Literatur;* Thomas, *German Anthology.*

HISTORY.

74. Ancient History.—History of Greece, with special reference to its literature, politics and commerce.

75. Ancient History.—Rome, from the founding of the City to the fall of the Western Roman Empire, with special reference to literature, politics and commerce.

76. Medieval History.—From the fall of the Western to the fall of the Eastern Roman Empire. The Holy Roman Empire and the Papacy receive special attention.

77. Modern History.—The principal subjects studied are the revival of learning, the age of discovery, the Reformation in England, France and Germany, the Thirty Years' War, the age of Louis XIV., the French Revolution, the nineteenth century.

80. The History of the Nineteenth Century.—This course treats principally of the restoration of the Bourbons, the Revolutions of 1830 and 1848, the Austro-Prussian war, the Franco-Prussian war, the unification of Germany and of Italy.

81. American Political Institutions.—Nature of state and national systems; organization and powers of legislative, executive, and judicial departments of Federal Government.

82. European Constitutions.—Political institutions of England and Switzerland as compared with those of the United States.

83. Constitutional History of the United States.—Colonial Governments, the confederation, the federal constitution, national vs. state sovereignty.

84. Constitutional History of the United States.—War of 1812, federal judiciary, nullification act, state constitutions, the Civil War.

85. The Philosophy of History, based principally on the works of Balmes, Schlegel and Allies.

86. Church History.—From the founding of the Church to the Protestant Reformation, based on the works of Allies, Montalembert, Mann, Janssen, and Pastor. Illustrated lectures including the history and geography of the Holy Land.

ITALIAN.

87. Elementary Course.—Grammar, composition, reading.

Marinoni, *Italian Grammar and Italian Reader;* De Amicis, *Cuore;* Manzoni, *I Promessi Sposi.*

88. Dante.—

The *Vita Nuova;* the *Divina Commedia.*

MATHEMATICS.

89. Algebra.—Advanced algebra.

Hawkes, *Advanced Algebra.*

90. Trigonometry.—Plane and spherical.

Wentworth, *Plane and Spherical Trigonometry.*

91. Analytical Geometry.—General equation of the second degree; straight line, plane, surfaces of revolution.

Nichols, *Analytical Geometry.*

92. Calculus.—Differential and integral, with application to geometry, mechanics, engineering, and physics.

Osborne, *Differential and Integral Calculus.*

MECHANICS.

94. Mechanics.—Principles of statics and dynamics.

Maurer, *Technical Mechanics*, Part I.

95. Analytical Mechanics.—Statics of concurrent and parallel forces, theory of couples, friction, mass-moments. Theorems of Guldinus. Work and energy. Impulsive forces. Angular velocity and acceleration. Simple harmonic motion. Centroids of surfaces and solids. Moments of inertia, with application to engineering problems. The conical and the ordinary pendulum. Pressure due to gravitating liquids, center of pressure, equilibrium of floating bodies.

Bowser, *Analytical Mechanics.*

Bowser, *Hydromechanics.*

PEDAGOGY.

97. Principles of Education.—The educative process. The physical, mental, and moral laws upon which education is based. Aims and ideals of Catholic education. The teacher and his qualifications. School organization, hygiene and discipline. Aids to teaching.

Thorndike, *The Principles of Teaching;* Ruediger, *Principles of Education;* Shields, *The Psychology of Education;* Bagley and Colvin, *Human Behavior;* Horne, *Psychological Principles of Education.*

98. Methods in Teaching.—Meaning of instruction and its relation to education. The psychologic and logical views of knowledge. The psychologic basis of method. Its general principles. The function of the recitation. The conduct of the recitation.

Collar and Crook, *School Management and Methods of Instruction;* Brothers of the Christian Schools, *Elements of Practical Pedagogy;* Strayer, *Brief Course in the Teaching Process.*

99. History of Education.—Study of the educational thought and practice of the ancient nations. Early Christian education; medieval education; scholasticism; the universities. Influence of the Renaissance and the Reformation on educational ideas. The religious orders. Realism; naturalism; the psychologists; the sociological movement. Rise of modern school systems. Problems of present-day education.

McCormick, *History of Education;* Graves, *A History of Education;* Monroe, *Text-Book in the History of Education.*

PHILOSOPHY.

100. Introduction to Philosophy.—A general view of the field of philosophy; its principal problems. The more important philosophical systems.

Dubray, *Introductory Philosophy*.

101. Formal Logic.—The idea. Errors as to the nature of ideas in modern English and German philosophy. Definition. Division. The nature of judgment. The value of the syllogism.

Turner, *Lessons in Logic;* Brothers of the Christian Schools, *Elementary Course in Philosophy*.

102. Method.—General principles. Special methods. Deduction and induction. Methods of observation. Methods of explanation.

Jevons, *Lessons in Logic;* Brothers of the Christian Schools, *Elementary Course in Philosophy*.

103. Epistemology.—The possibility of certainty. Scepticism. Veracity of the senses and the intellect. Idealism vs. Realism. Universals. Authority and belief. Critical examinations of various theories of knowledge.

Poland, *The Truth of Thought*.

104. Metaphysics.—The Aristotelian transcendentals. Reality of substances. Causation. Errors concerning causation. Final causes.

Brothers of the Christian Schools, *Christian Philosophy*.

105. Cosmic Philosophy.—Nature, origin, and duration of the universe. Ultimate constituents of bodies. Theory of matter and form. Laws of nature. Possibility of miracles. The concepts of natural science and scholastic philosophy.

Brothers of the Christian Schools, *Christian Philosophy*.

106. Psychology.—Rational vs. experimental psychology; value of each. Faculty, habit and action. The life principle. Vegetative Life. Theory of sensation. Qualities of sensation. Intellection. Attention. Apperception. Association of Ideas. Evolutionism. Heredity. Freedom of will. Spirituality and immortality of the soul.

Maher, *Psychology*.

107. The Psychology of Education.—A study of mental development. The psychological basis of education and of methods of teaching. Refutation of prevalent errors in educational psychology.

109. Natural Theology.—Proof of God's existence and providence—Deism, pantheism, agnosticism, atheism. Existence of evil. Preservation of creatures. Divine concurrence.

Brothers of the Christian Schools, *Cours de Philosophie*.

110. General Ethics.—Nature of a human act. Ultimate end of human actions. Determinants of morality. Does the end justify the means? Hindrances to the perfection of a human act. The passions, habit, virtue, vice.

Brothers of the Christian Schools, *Cours de Philosophie*.

111. Special Ethics.—Man's rights and duties as an individual. Man's duties to God—Adoration, love, obedience. Man's duties to his neighbor as regards soul

and body. Man's duties to himself as to soul and body. Suicide and duelling.

Man's rights and duties as citizen. The state. Its constituent elements. Its origin, end, scope, and limits.

Common law of nations. Peaceful relations among nations.

Ecclesiastical society. The Church—Its orgin and constitution. Its ends and limits. Its superiority to the the state. Its mission to the modern world.

Brothers of the Christian Schools, *Cours de Philosophie.*

112. Experimental Psychology.—Elements and general methods. Elements of mental life; sensation, feeling, conation. Experiments on the outer senses and on the association of ideas, with special application to pedagogy.

Seashore, *Elementary Experiments in Psychology.*

113. History of Philosophy.—Principles of the great founders of Ancient Schools; their vitality as illustrated in modern views. History of medieval philosophy. History of modern philosophy. The Neo-Scholastic movement.

Turner, *History of Philosophy.*

PHYSICS.

114. Mechanics.—Matter and energy. Kinematics; rectilinear, curvilinear, and periodic motion. Dynamics; laws of motion, work and energy, rotation, equilibrium, elasticity, machines. Mechanics of fluids; molecular phenomena in fluids, density and specific gravity, fluids in motion, properties of gases.

Light.—Laws of propagation, velocity and intensity of light. Photometry. Reflection and refraction; formation of images by mirrors and lenses. Spectrum analysis and study of optical instruments.

Heat.—Temperature and its measurement. Expansion of solids, liquids and gases. Change of state. Conduction, convection, radiation and absorption of heat. Vapor tension. Latent heat and specific heat. Relation between heat and work; energy, actual and potential.

Sound.—Production and propagation, velocity, reflection and refraction. Simple cases of resonance and interference. Intensity, pitch and quality. Transverse vibrations of strings. Longitudinal vibration of columns of air and of rods; vibrations of plates and membranes. Determination of pitch and wave-length. Doppler's principle and applications.

Electricity and Magnetism.—Fundamental phenomena of static electricity; general laws of distribution and induction. The Leyden jar and other condensers. Influence machines. Atmospheric electricity. Use of quadrant electrometer. Primary and secondary batteries; electromotive force, strength of current, division of current in a network of conductors. Ohm's law and applications. Magnetic, thermal and chemical effects of the current. Laws of electrolysis. Measurement of current and resistance. The electromagnet. Current induction, induction by magnets, the induction coil, discharge in low and high vacua. Continuous-current dynamo and motor; the alternator. The electric transmission of energy. Electric lighting. Thermo-electric currents. Telegraphy and telephony. Wireless telegraphy.

Permanent magnets and molecular theory; magnetic induction; the magnetic circuit. Comparison of magnetic fields. Theory and use of the magnetometer and dip-circle. Terrestrial magnetism and determination of the magnetic elements; magnetic charts.

Carhart, *College Physics*.

Physical Laboratory.—Study of the magnetic field due to a magnet and combination of magnets. Curve of free magnetism. Law of the inverse square. Comparison of magnetic moments. The ratio $\frac{M}{H}$ also the product $M \times H$. Determination of magnetic dip. Laying out the meridian; magnetic declination. Measurement of electromotive force, resistance of conductors, and capacity of condensers. Battery resistance and current strength. Measurements relating to storage batteries. Use of the tangent galvanometer, ammeter and voltmeter for direct and alternating currents; the wattmeter and electrodynamometer; the copper voltameter. Quantitative estimate of heat development in a circuit.

PUBLIC SPEAKING.

116. Oral Interpretation.—Drill in articulation, intonation and gesture. Practice in short declamations. Individual and class criticism.

117. Oral Interpretation.—Lectures. Drill in articulation, intonation and gesture. Choice passages from the poets and prose writers of English literature. Individual and class criticism.

118. Argumentative Oratory.—Study of the oratorical principles of argumentation. Analysis of notable arguments. Practice in debate and in extempore speaking.

119. Public Address.—Preparation and delivery of original compositions, with special reference to the occasion and timeliness of the material used. Extempore addresses.

RELIGION.

121. Dogma.—Explanation of the principal dogmas, with special insistence on the continuity of the Church. The Church and science. Objections. History of the Old Testament.

Christian Brothers' *Manual of Christian Doctrine*, Part I.

122. Moral.—Explanation of the fundamental principles of Christian morality as contained in the decalogue. History of the New Testament.

Christian Brothers' *Manual of Christian Doctrine*, Part II.

123. Worship.—Grace, prayer, and the sacraments, with special references to the Council of Trent and the tenets of Protestantism. History of the Church.

Christian Brothers' *Manual of Christian Doctrine*, Part III.

SPANISH.

124. Elementary.—Grammar, reading, composition.

Hills and Ford, *Spanish Grammar;* Ramsey, *Elementary Reader;* Alarcon, *El Capitán Veneno;* Valera, *El Pajaro Verde.*

125. Intermediate.—Reading, conversation, composition.

Ford, *Spanish Composition;* Cervantes, *Don Quijote;* Pereda, *Pedro Sánchez;* Moratin, *El Si de las Ninas.*

126. Advanced.—Composition, conversation. Calderon, *El Principe Constante; La Vida es Sueno;* Lope de Vega, *La Estrella de Sevilla.*

MANHATTAN COLLEGE HIGH SCHOOL.

The aim of the High School is to prepare for admission to college. The studies conform to the *Syllabus for Secondary Schools* of the New York State Education Department.

The requirements for admission are the preliminary studies prescribed by the Education Department. The most favorable time for entrance is at the beginning of the scholastic year. The regular examinations for admission take place on the two days immediately preceding each term.

The classes are frequently examined, and students are not allowed to pass from one subject to another until they have given evidence of adequate knowledge of the subject. A student who shows by the results of the examinations that he is unable to keep up with his class will be placed in a lower grade.

The Inspector examines weekly the record of every pupil, and comments upon it before the professors and students of the class.

Summarized reports of the examinations are forwarded to the parents at the end of each quarter.

Since each report shows the exact standing of the student, it should be carefully examined by his parent or guardian.

Percentages are rated as follows: From 90 to 100, excellent; from 80 to 90, very good; from 70 to 80, good; under 60, unsatisfactory.

Promotions are based on the joint results of the quarterly examinations and the daily marks. No student will be promoted unless he attains an average of at least 60 per cent. in each subject, and a general average of 70 per cent.

Students who fail to get the average required in any subject may present themselves for examination on the two days immediately preceding the reopening in September. A fee of one dollar is required for each subject examined.

At least three hours a day should be given to the preparation of class work.

The active co-operation of parents with the faculty is essential to the progress of the student. Parents are therefore requested to insist upon regular attendance and careful preparation of class work.

Punctuality at all sessions and recitations is required.

In all cases of absence a written excuse from parents or guardian is required. This excuse will not be accepted in lieu of omitted class work.

Wednesday and Saturday afternoons are the regular weekly half-holidays.

Students who live in the College may not leave the grounds without authorization.

COMMERCIAL DEPARTMENT.

Students who desire to prepare for mercantile life will find every facility in the Commercial Department. This department comprises two years' work, and no student is admitted until he has satisfactorily completed the studies of the *second year* of high school.

The students receive a thoro course in standard business methods and in the science of accounts. A complete course in commercial arithmetic is given, and ample opportunity is afforded for the practice of shorthand and typewriting.

The Commercial course does not, however, confine its work to purely business branches. Subjects of general culture are also included. English composition and letter-writing receive special attention. The student is required to treat prescribed subjects in a manner that will enable him to write with ease and elegance. Questions relating to political economy and commercial law are discussed in the class-room in order to give the student correct ideas on the vital questions of daily life. Weekly lessons are given in the art of public speaking, in order that the student may acquire an easy and graceful delivery.

Students who complete the Commercial course receive a certificate as a guarantee of their fitness for mercantile employment.

COURSE OF STUDY—HIGH SCHOOL.

FIRST YEAR.

ENGLISH. (5)—Hanson, *Two Years' Course in English Composition.*
Stevenson, *Treasure Island;* Coleridge, *The Ancient Mariner;* Parkman, *Oregon Trail.*

ALGEBRA. (5)—Through Quadratics.
Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Guerber, *Contes et Légendes.*

BIOLOGY. (5)—Peabody and Hunt, *Elementary Biology.*

BUSINESS WRITING. (2).

DRAWING. (2)—*Syllabus for Secondary Schools*, pp. 380-384.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Dogma.*

SECOND YEAR.

ENGLISH. (3)—Hanson, *Two Years' Course in English Composition;* Irving, *Sketch Book;* Shakespeare, *Merchant of Venice;* Eliot, *Silas Marner*; Goldsmith, *The Deserted Village.*

PLANE GEOMETRY. (5)—Wentworth, *Plane Geometry.*

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* Figures in parentheses indicate the number of recitations a week.

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Daudet, *Neuf Contes Choisis;* Labiche et Martin, *La Poudre aux Yeux;* Mairet, *La Tâche du Petit Pierre.*

GERMAN. (5)—Spanhooft, *Lehrbuch der deutschen Sprache;* Holzwarth, *Grusz aus Deutschland.*

ANCIENT HISTORY. (3)—Wolfson, *Essentials in Ancient History.*

DRAWING. (2)—*Syllabus for Secondary Schools*, pp. 384-385.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Moral.*

THIRD YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric; The Sir Roger de Coverley Papers;* Shakespeare, *Henry V;* Dickens, *A Tale of Two Cities;* Tennyson, *Gareth and Lynette*, *Launcelot and Elaine* and *The Passing of Arthur.*

ELOCUTION. (1).

SOLID GEOMETRY (First Term). (4)—Wentworth, *Solid Geometry.*

INTERMEDIATE ALGEBRA (Second Term). (4)—Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Enault, *Le Chien du Capitaine;* Labiche, *La Grammaire;* Sarcey, *Le Siége de Paris;* Racine, *Esther.*

GERMAN. (5)—Spanhooft, *Lehrbuch;* Hillern, *Höher als die Kirche;* Schiller, *Der Neffe als Onkel;* Zschokke, *Der zerbrochene Krug;* Benedix, *Der Prozess.*

PHYSICS. (5)—Carhart and Chute, *First Principles of Physics;* Chester, Dean, Timmerman, *Laboratory Manual of Physics.*

DRAWING. (1)—*Syllabus for Secondary Schools*, pp. 385-386.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Worship.*

FOURTH YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric;* Burke, *Speech on Conciliation with America;* Miton, *L'Allegro*, *Il Penseroso*, *Comus;* Macaulay, *Life of Johnson;* Shakespeare, *Macbeth.*

ELOCUTION. (1)

TRIGONOMETRY. (2)—Wentworth, *Plane and Spherical Trigonometry.*

FRENCH. (4)—Fraser and Squair, *Shorter French Course;* Lamartine, *Jeanne d'Arc;* Hugo, *Hernani;* Racine, *Athalie.*

GERMAN. (4)—Riehl, *Der Fluch der Schönheit;* Freytag, *Die Journalisten;* Schiller, *Wilhelm Tell;* Hatfield, *German Lyrics and Ballads.*

AMERICAN HISTORY AND CIVICS. (5)—Hart, *Essentials in American History;* Boynton, *School Civics.*

CHEMISTRY. (5)—Brownlee, *First Principles of Chemistry;* Brownlee, *Laboratory Exercises.*

DRAWING. (1)—*Syllabus for Secondary Schools*, p. 386.

RELIGION. (2)—Christian Brothers' Series, No. 4. Complete.

COMMERCIAL COURSE.

For First and Second Years see pages 54 *and* 55.

THIRD YEAR.

ENGLISH. (3)—See English, p. 55.

ELOCUTION. (1)

CIVICS. (2)—See Civics, p. 57 (above).

COMMERCIAL LAW. (3)—Richardson, *Commercial Law.*

FRENCH. (5)—See French, p. 56.

or

GERMAN. (5)—See German, p. 56.

or

SPANISH. (5)—See Spanish, No. 124.

SHORTHAND. (5)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

TYPEWRITING. (2)—Smith, *A Practical Course in Touch Typewriting.*

COMMERCIAL ARITHMETIC. (4)—Moore and Miner, *Practical Business Arithmetic.*

RELIGION. (2)—See Religion, p. 56.

FOURTH YEAR.

ENGLISH. (3)—See English, p. 56.

ELOCUTION. (1)

POLITICAL ECONOMY. (3)—Laughlin, *Elements of Political Economy.*

FRENCH. (5)—See French, p. 56.

or

GERMAN. (5)—See German, p. 57.

or

SPANISH. (5)—See Spanish, No. 125.

SHORTHAND AND TYPEWRITING. (6)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

BOOKKEEPING. (5)—Montgomery, *Bookkeeping and Business Practice.*

RELIGION. (2)—See Religion, p. 57.

PRIZES AND MEDALS.

COLLEGE.

1. A purse of $50 is awarded by the Alumni Society to the best English essayist of the graduating class. The prize contest consists of two essays, one prepared and the other extemporaneous. The subject of the first is announced at the beginning of the month of October, and the essay must be presented not later than the second Tuesday of April. The subject of the second is announced when the candidates are assembled to write the essay.

2. The Milmo-McGowan Medal for religious instruction was founded by Mrs. B. McGowan, in memory of her son, Mr. Michael J. McGowan, '69. This medal is awarded on competitive examination on the subject matter of the four years' course in Christian doctrine and church history. The examination takes place at the end of May.

3. The Kelly Medal for philosophy, offered to the students of the Senior Class, was founded by the late Mr. Eugene Kelly, of New York City. This medal is awarded for proficiency in logic, metaphysics, and psychology.

4. The Grady Memorial Medal for oratory was founded by the Alumni Society in memory of Rev. John M. Grady, '69. The contest for this medal is open to all College students.

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* In all cases in which "record" determines the award, failure in a regular examination eliminates the candidate.

5. The Medal for the Philosophy of History is awarded to the student of the Senior Class who obtains the highest average in this subject.

6. The Medal for Pedagogy is awarded to the student who obtains the highest average in this subject during Junior and Senior years.

7. The Cohalan Medal for civil engineering, the gift of Hon. Daniel F. Cohalan, LL.D., '85, in memory of his father, is awarded to the Senior student who has the highest record for the year in the civil engineering course.

8. The Develin Medal for French, founded by Mr. Charles E. Miller, of New York City, in honor of his friend, Mr. John E. Develin, is awarded by competitive examination on the matter of the four years' College course.

9. The Radford Medal for Natural Science is offered by the Alpha Beta Sigma to the student who has the highest average in Natural Science during his College course.

10. The Doelger Medal for German, the gift of Mrs. Doelger, in memory of the late Peter Doelger, is awarded to the student who has the highest record for the four years' College course in German.

HIGH SCHOOL.

1. The Medal for Elocution is awarded by competition among the students of the High School Department.

2. The Medal for Excellence is awarded to the pupil who has the highest general average for the fourth year of the High School course.

3. The Brother Charles Memorial Medal, donated by the Commercial Alumni Society, is awarded to the stu-

dent of the Commercial Department who has the highest record for proficiency throughout the course.

4. The Kean Medal for Christian doctrine, donated by the Rt. Rev. Mgr. John J. Kean, LL.D., '66, is open to all students of the Commercial Department.

5. The Pommerer Medal, donated by William C. Pommerer, M. A., '91, is awarded to the student of the graduating class who passes the best examination in shorthand and typewriting.

COLLEGE SOCIETIES.

THE APOSTLESHIP OF PRAYER and LEAGUE OF THE SACRED HEART.

The Apostleship of Prayer and League of the Sacred Heart is established in the College and High School departments to foster among the students the spirit of piety, to enable them to acquire more thoroly the spirit of Christianity, and to kindle in them zeal for works of reparation towards our Divine Lord.

The Communion of Reparation is made every first Friday, and the morning offering and daily "decade" form a part of the regular class exercises. Devotions in honor of the Sacred Heart are held in the College chapel on the first Friday of each month.

THE ARCHCONFRATERNITY OF THE HOLY CHILD JESUS.

This Archconfraternity has been erected in the chapel of the Brothers of the Christian Schools at Bethlehem. To it belong pupils of the Brothers' schools thruout the world. Its end is to obtain from Heaven thru the Divine Child Jesus: 1st, That God may have the first place in all the studies in educational establishments; 2nd, that teacher and pupils may be everywhere free to observe the laws of Holy Church without any restraint whatever; 3rd, that Catholic children may not be exposed to lose their faith in schools where God is not recognized. The Archconfraternity publishes a quarterly review entitled, *Little Messenger of the Divine Infant.*

MANHATTAN COLLEGE ALUMNI SOCIETY.

The object of the Society is to keep alive among the Alumni a sentiment of affection for their Alma Mater, and to unite the graduates of successive years by a common tie of fellowship.

There are three reunions of the Society each year; at the Alumni dinner, at the Memorial Mass on Decoration day, and at the reception of the newly graduated class on Commencement day.

OFFICERS.

President	HON. PETER A. SHEIL, '96
First Vice-President	JOHN E. KIFFIN, '99
Second Vice-President	JOSEPH A. DILLON, M. D., '87
Third Vice-President	JOHN J. MCBRIDE, '01
Secretary	JOHN FRANCIS BROSNAN, '11
Treasurer	REV. JOHN T. JORDAN, '98
Historian	REV. BROTHER CHRYSOSTOM, '81

MANHATTAN COMMERCIAL ALUMNI SOCIETY.

The Manhattan Commercial Alumni Association was organized September 5, 1901. Two meetings are held yearly.

OFFICERS.

President	WILLIAM C. POMMERER, '91
First Vice-President	JAMES F. KELLY, '05
Second Vice-President	CHRISTOPHER M. LEONARD, '10
Secretary	THOMAS P. HALE, '12
Treasurer	JAMES A. SMYTH, '08
Historian	BERNARD J. KEARNEY, '08

DE LA SALLE LITERARY SOCIETY.

This Society is confined to the students of the Senior year. The end proposed is the free discussion of questions pertaining to philosophy, which have been suggested, but not fully treated in the class-room. The Professor of Philosophy acts as Moderator.

OFFICERS.

President	RAYMOND S. O'CONNOR
Vice-President	DANIEL J. HOULIHAN
Secretary	JOHN J. COSTA
Treasurer	FREDERICK F. FARACI
Critic	FRANCIS X. SCANLAN
Historian	WOOLSON F. MCCORMACK

NEWMAN LITERARY SOCIETY.

The members of the Junior Class form this Society. The exercises, consisting of original essays and debates on literary or other subjects, are held weekly. The Professor of English Literature acts as Moderator.

OFFICERS.

President	JOSEPH A. CORBALIS
Vice-President	JOHN J. DUNNE
Secretary	HARRY V. MITCHELL
Treasurer	P. FRANCIS CANAVAN

HUGHES LITERARY SOCIETY.

This Society consists of the students of the Sophomore year. Meetings are held twice a month, the principal exercises of which are debates on historical and scientific subjects, and on questions of the day, as well as essays on various topics. The senior Professor of the class is Moderator of the Society.

OFFICERS.

President	JOHN J. O'DONNELL
Vice-President	HUGH J. CARROLL
Secretary	SYLVESTER W. DEL BELLO
Treasurer	THOMAS J. MCBREEN
Critic	JOSEPH A. CAPOZZI

McCLOSKEY LITERARY SOCIETY.

This Society, composed of the members of the Freshman Class, holds its regular meeting on Friday afternoon. The exercises consist principally of debates on various subjects and essays on literary and historical topics. The Professor of English literature is Moderator of the Society.

OFFICERS.

President	F. LE ROY HAGAN
Vice-President	THOMAS F. SULLIVAN
Secretary	PAUL M. HOWLETT
Treasurer	GERALD A. HOULIHAN

HAYES LITERARY SOCIETY.

The students of the Fourth Year High School have formed a literary society, which they have named after the Rt. Rev. Patrick J. Hayes, '88, Auxiliary-Bishop of New York. They hold regular weekly meetings, and sometimes class exercises, to which the College students are invited. The senior Professor of the class acts as Moderator.

Officers.

President	John J. Manning
Vice-President	Leo. F. Fennelly
Secretary	Walter J. Leonard
Treasurer	Thomas Boyne

FARLEY LITERARY SOCIETY.

This Society is composed of the Senior students of the Commercial Department. Literary exercises and discussions of questions pertaining to business and commerce constitute the program for the weekly meetings. The Principal of the Department acts as Moderator.

Officers.

President	Patrick A. Ward
Vice-President	James A. Nolan
Secretary	Joseph E. Haugh
Treasurer	William J. Caffrey

THE MANHATTAN COLLEGE ENGINEERING SOCIETY.

Membership in this Society is limited to students of engineering in the Junior and the Senior classes. Meetings are held bi-weekly, at which papers are read by students and discussed by students and instructors.

President	William M. Hauck
Vice-President	Vincent J. McMorrow
Secretary	Raymond S. O'Connor
Treasurer	Gerald V. Cruise

MANHATTAN COLLEGE ATHLETIC ASSOCIATION.

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Manager, Baseball	Thomas R. Owens
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Executive Committee: Rev. Brother Matthew, Rev. Brother Azarias, Edward A. Hanrahan, '06, Joseph T. Houlihan, '09, Thomas J. McEntegart, '12.

COLLEGE PUBLICATIONS.

THE MANHATTAN QUARTERLY.

The *Manhattan Quarterly* is a literary magazine published by the students of Manhattan during the months of January, April, July, and October. Its object is to encourage among the students literary composition of a high order of merit, and to serve as a link between former students of Manhattan and their Alma Mater, by keeping them in touch with the leading thought of the College and of the Alumni Society.

STAFF.

Editor-in-Chief—FRANCIS A. FRITZ, '15.
Associate Editors—RICHARD J. BARRY, '15;
THOMAS J. O'CONNOR, '16.
Exchange Editors—LORENZ J. BROSNAN, '15;
PATRICK J. MCENTEGART, '17.
Alumni Editor—JOSÉ M. FERRER, M. D., '76.
Athletics—THOMAS J. GRAY, '15;
EDWARD J. GIBBONS, '18.
Current Topics—GEORGE J. CONNOLLY, '15.
Business Managers—MATHIAS H. WEIDEN, '15;
GERALD CRUISE, '16.

THE NEWS-LETTER.

The *News-Letter* was founded in 1900, mainly thru the energy of Dr. José M. Ferrer, '76, and the generosity of members of the Alumni Society. It is published monthly from October to June. The chief object of the publication is to give College news, and also items of interest concerning graduates of the various departments.

REGISTER OF STUDENTS—1914-1915.

ADRIAN, LAWRENCE J	Pleasantville, N. Y.
BADER, ALBERT X	New York.
BARRY, BERNARD J	New York.
BARRY, JOHN A	New York.
BARRY, RICHARD J	Long Island City, N. Y.
BASSETT, JOHN E	Troy, N. Y.
BEGLEY, DANIEL J	New York.
BLAKEMORE, WALTER E	New York.
BOLAND, WILLIAM J	New York.
BOULANGER, LIONEL	Montreal, Canada.
BOWE, THOMAS J	New York.
BOYNE, THOMAS	Bloomfield, N. J.
BRADY, JOHN E	New York.
BRASSEL, SAMUEL A	New York.
BRENNAN, JAMES T	Stamford, Conn.
BROPHY, JAMES F	Yonkers, N. Y.
BROSNAN, LORENZ J	New York.
BURKE, WILLIAM F	Buffalo, N. Y.
BYRNE, JAMES F	Troy, N. Y.
BYRNE, MICHAEL J	New York.
CAFFREY, WILLIAM J	Far Rockaway, N. Y.
CANAVAN, FRANCIS P	New York.
CANAVAN, WILLIAM J	New York.
CAPOZZI, JOSEPH A	New York.
CAROLAN, WILLIAM	Brooklyn, N. Y.
CARROLL, FRANCIS X	Unionport, N. Y. City.
CARROLL, HUGH J	New York.
CASEY, JOSEPH M	Troy, N. Y.
CASEY, WILLIAM P	New York.
CASHMAN, EDWARD J	New York.
CASSIDY, MORTIMER M	New York.
CAVANAGH, JAMES A	New York.
CINCOTTI, FREDERICK	New York.
CLEARY, JOHN M	New York.
CLEARY, MICHAEL J	New York.
COCHRAN, FRANK W	New York.
CLEMENS, RICHARD J	Wappinger Falls, N. Y.

COLEMAN, BERNARD R	Troy, N. Y.
COLEMAN, THOMAS F	Central Falls, R. I.
CONNOLLY, FRANCIS J	New York.
CONNOLLY, GEORGE J	New York.
CONNORS, THOMAS J	Watertown, N. Y.
CONWAY, WILLIAM E	New York.
COOGAN, JOHN J	New York.
CORBALIS, CHARLES L	Yonkers, N. Y
CORBALIS, JOSEPH A	Yonkers, N. Y
COSTA, JOHN J	New York.
CREED, FRANCIS J	New York.
CREGAN, MICHAEL A	New York.
CRUISE, GERALD V	New York.
CRUISE, PHILIP J	New York.
DALTON, CHARLES J	Ontario, Canada.
DART, CHARLES A	New York.
DEGNAN, JAMES J	New York.
DEL BELLO, SYLVESTER W	Yonkers, N. Y.
DEL BELLO, BERNARD	Yonkers, N. Y.
DEVANNY, CHARLES J	New York.
DIEDRICH, ARTHUR	Detroit, Michigan.
DILLON, JOSEPH V	New York.
DILLON, VERNON S	Skaneateles, N. Y.
DONNELLY, JOSEPH J	New York.
DONOHUE, RAYMOND A	New York.
DONOHUE, WALTER P	New York.
DORANTES, RAFAEL A	New York.
DOWD, JOSEPH	Brooklyn, N. Y.
DOWNING, FRANCIS J	Buffalo, N. Y.
DRISCOLL, EUGENE J	New York.
DRISCOLL, FRANCIS X	New York.
DRISCOLL, PATRICK J	New York.
DUNNE, JOHN J	Riverdale, N. Y.
DWYER, WILLIAM J	New York.
FANNING, FRANCIS A	Westchester, N. Y.
FARACI, FREDERICK F	New York.
FARRELL, BERNARD J	Mt. Vernon, N. Y.
FARRELL, FRANK M	East Orange, N. J.
FARRELL, VINCENT J	East Orange, N. J.
FARRELL, WALTER P	New York.

FAY, GREGORY F	Syracuse, N. Y.
FENNELLY, LEO F	New York.
FERNANDEZ, LOUIS	Cayey, Porto Rico.
FISHER, WILLIAM E	New York.
FITZGERALD, ROBERT J	New York.
FLOOD, JEREMIAH J	New York.
FOLEY, JOHN J	New York.
FONDA, JAMES A	New York.
FRITZ, FRANCIS A	Butler, N. J.
FRYER, JOHN F	New York.
FULLAM, MARTIN A	New York.
GALLAGHER, THOMAS J	New York.
GARGUILO, DEWEY J	New York.
GAROFALO, ANTHONY	New York.
GARVEY, JOHN L	New York.
GENTHON, RENE M	Clifton, N. J.
GIBBONS, EDWARD T	Providence, R. I.
GONDA, WILLIAM L	Yonkers, N. Y.
GRADY, JAMES M	New York.
GRANAHAN, RICHARD F	New York.
GRAY, THOMAS J	New York.
GREGORY, JAMES A	New York.
HACKETT, JOHN F	New York.
HAGAN, ALFRED F	New York.
HAGAN, LE ROY	New York.
HANNAN, EDMUND	New York.
HANNIGAN, HUBERT	Yonkers, N. Y.
HAUCK, WILLIAM M	New York.
HAUGH, FRANCIS J	New York.
HAUGH, JOSEPH E	New York.
HAYES, GEORGE J	New York.
HEILMAN, LOUIS C	New York.
HICKEY, BENJAMIN J	New York.
HIGGINS, WILLIAM	New York.
HOPKINS, FRANCIS R	New York.
HORAN, JOHN J	New York.
HOULIHAN, AMBROSE	Stamford, Conn.
HOULIHAN, DANIEL J	New York.
HOULIHAN, GERALD A	New York.
HOULIHAN, JAMES A	New York.

HOULIHAN, JOHN J	New York.
HOWLETT, PAUL M	Buffalo, N. Y.
HUBBARD, WILLIAM	Danbury, Conn.
HULSEBOSCH, LEONARD A	New York.
HURLEY, JOHN J	New York.
JONES, EDWARD L	Utica, N. Y.
JOYCE, EDWARD J	Elmhurst, L. I., N. Y.
KANE, LEO J	Yonkers, N. Y.
KAVANAGH, RICHARD A	New York.
KEANE, LAWRENCE F	New York.
KEARSING, JAMES G	New York.
KELLY, ARTHUR A	New York.
KELLY, HOWARD	New York.
KELLY, JOHN J	New York.
KELLY, JOHN M	Yonkers, N. Y.
KELLY, THOMAS A	New York.
KELLY, WILLIAM A	Brooklyn, N. Y.
KENNEDY, JOHN M	Burmont, Pa.
KENNEDY, THOMAS A	New York.
KENNEY, PETER H	New York.
KEOGH, JOHN J	New York.
KILLEEN, HENRY S	Buffalo, N. Y.
KILLEEN, THOMAS	Buffalo, N. Y.
LEONARD, WALTER J	New York.
LECLERCQ, GEORGE	Grantwood, N. J.
LIMA, GUSTAVO	Viegues, Porto Rico.
LOGUE, FRANCIS J	White Plains, N. Y.
LOPEZ, PAULINO	Fayardo, Porto Rico.
LOUGHRAN, JOHN C	New York.
LOUGHRAN, WILLIAM H	New York.
LYNCH, FRANK J	Staten Island, N. Y.
McAULIFFE, ROLAND J	New York.
McBREEN, THOMAS J	New Brighton, N. Y.
McBRIDE, PETER F	New York.
McCANN, LAWRENCE E	New York.
McCONNELL, ARTHUR J	New York.
McCONNON, B. P.	New York.
McCONVILLE, BERNARD	New York.
McCORMACK, WOOLSON F	New York.
McCORMICK, WILLIAM H	New York.

McENTEGART, BERNARD J	New York.
McENTEGART, JAMES A	New York.
McENTEGART, PATRICK J	New York.
McENTEGART, THOMAS V	New York.
McENTIRE, JOSEPH A	New York.
McEVOY, CHARLES A	New York.
McGEE, THOMAS J	New York.
McMORROW, VINCENT T	New York.
MAHONEY, FRANCIS J	New York.
MALLEN, JOSE R	Santo Domingo.
MANGAN, DANIEL C	Brooklyn, N. Y.
MANNING, JOHN T	New York.
MANNING, JOSEPH A	New York.
MARTIN, DAVID J	New York.
MARTIN, ROBERT T	New York.
MASON, PATRICK J	New York.
MAYER, ARTHUR C	New York.
MEEHAN, JOHN V	New York.
MICHEL, GROVER T	New York.
MITCHELL, HARRY V	New York.
MORRISSEY, THOMAS F	Troy, N. Y.
MULCAHY, ROBERT G	New York.
MULLIGAN, THOMAS J	New York.
MURPHY, DANIEL J	Troy, N. Y.
MURRAY, EDWIN M	New York.
MURRAY, THOMAS B	New York.
NICHOLLS, ROBERT H	New York.
NOLAN, HUGH J	New York.
NOLAN, JAMES A	Brentwood, N. J.
NOONAN, BERNARD J	New York.
NOONAN, FRANCIS J	New York.
O'BRIEN, ALFRED J	New York.
O'BRIEN, WILLIAM F	New York.
O'BRIEN, WILLIAM J	New York.
O'CONNOR, EDWARD B	Tonawanda, N. Y.
O'CONNOR, FRANK L.	Manchester, N. H.
O'CONNOR, RAYMOND S	Percy, N. H.
O'CONNOR, THOMAS J	New York.
O'DONNELL, JOHN J.	New York.
O'DOWD, GEORGE W	Long Island City, N. Y.

O'FLYNN, CHARLES J	New York.
O'MARA, FRANCIS J	New York.
O'NEILL, D. EDWIN	New York.
O'REILLY, JAMES V	New York.
O'REILLY, JOHN J	New York.
ORDOÑEZ, ENRIQUE B	New York.
OVALLE, PHILIP S	Colombia, S. A.
OVALLE, RICHARD A	Colombia, S. A.
OWENS, THOMAS R	Providence, R. I.
PARIS, GABRIEL	New York.
PENNEFATHER, ARTHUR G	New York.
PHELAN, THOMAS W	Troy, N. Y.
POWER, CHARLES S	New York.
PRENDERGAST, VINCENT J	New York.
PRIAL, FRANK B	New York.
QUINLAN, THOMAS J	New York.
QUINN, DENIS C	New York.
QUINN, JOHN J	New York.
QUINN, ROBERT	New York.
QUINN, WILLIAM D	New York.
QUINN, WILLIAM J	New York.
REGAN, CYRIL V	New York.
REID, AUGUST A	New York.
REILLY, THOMAS J	Providence, R. I.
RETALEATO, LOUIS J	New York.
ROGAN, JOHN J	New York.
ROOT, SIDNEY J	New York.
RYAN, CHARLES F	New York.
RYAN, JAMES R	Hoboken, N. J.
SCALLION, WALTER V	New York.
SCANLAN, FRANCIS X	New York.
SCHRODER, WILLIAM F	New York.
SCHULTE, J. T	Astoria, N. Y.
SCOCOZZA, MICHAEL D	New York.
SCULLY, ALBERT F	New York.
SEXTON, THOMAS	New York.
SHANNON, GEORGE C	New York.
SMITH, JAMES L	New York.
SMITH, JOHN M	New York.
SMITH, THOMAS	New York.

SMITH, WILLIAM P	New York.
SOMERS, ANDREW L	Brooklyn, N. Y.
SPINELLI, MICHAEL A	New York.
STALB, JOSEPH G	New York.
STANLEY, FRANCIS A	New York.
STEVARAGLIA, PHILIP F	Utica, N. Y.
SUAREZ, JOSE	Havana, Cuba.
SULLIVAN, THOMAS F	New York.
SWEENEY, FRANCIS J	New York.
TIGUE, WILLIAM B	Port Jervis, N. Y.
TIMONEY, JOHN V	New York.
TOWLE, FELIX S	New York.
WALSH, JOHN P	New York.
WARD, EDWARD J	New York.
WARD, FRANK D	New York.
WARD, PATRICK A	Wilkes Barre, Pa.
WATERS, M. J	New York.
WEIDEN, MATHIAS H	New York.
WHITE, FRANK V	New York.
WHITE, JAMES	New York.
WILKINS, HENRY J	New York.
WILLIAMS, E	New York.
ZIVI, FRANK J	New York.
ZURMUHLEN, FREDERICK H	New Brighton, S. I.
ZWEISLER, ALBERT T	New Brighton, S. I.

SIXTY-FIRST - - - ANNUAL

COMMENCEMENT
of
MANHATTAN COLLEGE

Right Rev. Mgr. Michael J. Lavelle, LL.D., V. G., '73

PRESIDING

CARNEGIE HALL

Tuesday, June Sixteenth, 1914

ORDER OF EXERCISES

OVERTURE—"Pique Dame" - - - *Von Suppe*
ORCHESTRA

A REMEDY FOR SOCIAL UNREST - Robert Eugene Dunn

VOCAL QUARTET—"Go Forth My Song" - - *Seitz*
MANHATTAN ALUMNI QUARTET

SELECTION—"Adele" - - - - - *Briquet*
ORCHESTRA

IRELAND'S FUTURE - - - - John George Murphy

(*a*) SELECTION—"Sari" - - - - *Kalman*
(*b*) BARCAROLLE—"Tales of Hoffman" - *Offenbach*
ORCHESTRA

THE CATHOLIC SOLDIER - William Augustine Farrell

VOCAL QUARTET—"Little Jack Horner" - - *Ashford*
MANHATTAN ALUMNI QUARTET

CONFERRING OF DEGREES.

GRANTING OF COMMERCIAL DIPLOMAS

AWARDING OF PRIZES

ADDRESS TO THE GRADUATES

THE HON. THOMAS W. CHURCHILL
President of the Board of Education.

FINALE—"Universal Peace" - - - - *Lampe*
ORCHESTRA

THE DEGREE OF BACHELOR OF ARTS

WILLIAM AUGUSTINE FARRELL
THOMAS DENNIS KELLY

DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

FERDINAND JOSEPH ENTERLIN, *with honor*
JOHN GEORGE MURPHY, *with credit*

JOSEPH AUGUSTINE MURRAY, JR.
CHARLES JOSEPH CUNNINGHAM
RUPERT WILLIAM FAGAN
ROBERT EUGENE DUNN
JOSEPH MICHAEL CUNNINGHAM
HENRY MICHAEL BOLTON, JR.

SAMUEL JOSEPH VASTOLA
WILLIAM EDWARD MOLYNEAUX
RICHARD JOSEPH DUFFY
RICHARD DENNIS McCANN

THE DEGREE OF MASTER OF ARTS

DAVID C. BRODERICK, B. A., '07

THE DEGREE OF CIVIL ENGINEER

LEO C. BURROWS, B. S., '06
JAMES B. MARTIN, B. S., '11
FRANCIS J. BEAGAN, B. S., '11
EDWIN B. McGUIRE, B. S., '11
JAMES J. SUMMERS, B. S., '12

HONORARY DEGREES.

DOCTOR OF LAWS

THE HONORABLE JOHN F. BRENNAN, B. A., '75; M. A., '78
THE HONORABLE HERMAN A. METZ

COMMERCIAL DIPLOMAS.

FRANCIS JOSEPH BREEN
EDMUND AUGUSTINE O'BRIEN
THOMAS RAYMOND MORGAN
ROBERT THOMAS CLIFFORD
THOMAS MICHAEL CLARKE
WALTER JOSEPH O'BRIEN
ELMER JOSEPH CLEARY
DANIEL JOSEPH MCCARTHY

DONORS OF PRIZES FOR THE YEAR

MRS. B. MCGOWAN

MR. EUGENE KELLY

THE RIGHT REVEREND MONSIGNOR
MATTHEW A. TAYLOR, LL.D.

THE ALUMNI SOCIETY OF MANHATTAN COLLEGE (TWO PRIZES)

THE HONORABLE DANIEL F. COHALAN, LL.D., '85

MR. HERMAN RIDDER

REVEREND EDWIN M. SWEENY

MRS. MARY DOELGER

THE COMMERCIAL ALUMNI SOCIETY OF MANHATTAN COLLEGE

THE RIGHT REVEREND MONSIGNOR JOHN J. KEAN, LL.D., '66

MR. WILLIAM C. POMMERER, M. A., '91

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FORM OF BEQUEST

— TO —

Manhattan College

I give and bequeath to MANHATTAN COLLEGE, NEW YORK CITY, the sum of ______________________________ dollars, to be expended by the Trustees in such manner as seems to them most useful to the College.

Manhattan College

New York

Catalogue 1916-1917

Catalogue

of

Manhattan College

and

Manhattan College
High School

NEW YORK

CONDUCTED BY

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1916-1917

THE
JOHN CRERAR
LIBRARY

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General Calendar

1916

	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
Jan.	..	..	..	..	..	..	1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
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Oct.	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
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	22	23	24	25	26	27	28
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Nov.	..	..	..	..	..	..	..
	..	..	..	1	2	3	4
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	12	13	14	15	16	17	18
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Dec.	..	..	..	..	..	1	2
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	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
	31	..	..	..	..	..	..

1917

	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
Jan.	..	1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31	..	..	..
	..	..	..	..	..	..	..
Feb.	..	..	..	..	1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	..	..	..
Mar.	..	..	..	..	..	..	..
	..	..	..	..	1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	31
Apr.	..	..	..	..	..	..	..
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	..	..	..	..	..

	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
May	..	..	1	2	3	4	5
	6	7	8	9	10	11	12
	13	14	15	16	17	18	19
	20	21	22	23	24	25	26
	27	28	29	30	31	..	..
	..	..	..	..	..	..	..
June	..	..	..	..	..	1	2
	3	4	5	6	7	8	9
	10	11	12	13	14	15	16
	17	18	19	20	21	22	23
	24	25	26	27	28	29	30
July	..	..	..	..	..	..	..
	1	2	3	4	5	6	7
	8	9	10	11	12	13	14
	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
	29	30	31	..	..	..	..
Aug.	..	..	..	..	..	..	..
	..	..	..	1	2	3	4
	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
	26	27	28	29	30	31	..

	Sun.	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.
Sept.	..	..	..	..	..	..	1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	..	..	..	..	..	..
Oct.	..	1	2	3	4	5	6
	7	8	9	10	11	12	13
	14	15	16	17	18	19	20
	21	22	23	24	25	26	27
	28	29	30	31	..	..	..
	..	..	.	..	..	..	..
Nov.	..	..	..	..	1	2	3
	4	5	6	7	8	9	10
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	25	26	27	28	29	30	..
Dec.	..	..	..	..	..	..	1
	2	3	4	5	6	7	8
	9	10	11	12	13	14	15
	16	17	18	9	20	21	22
	23	24	25	26	27	28	29
	30	31	..	..	..	..	..

COLLEGE CALENDAR.

1916

Sept. 4-7,	Monday-Thursday	Registration.
Sept. 8-9,	Friday-Saturday	Condition and Entrance Examinations.
Sept. 11,	Monday	Class Exercises begin.
Oct. 12,	Thursday	Columbus Day.
Oct. 23-25,	Monday-Wednesday	Annual Retreat.
Nov. 1,	Wednesday	All Saints' Day, Holiday.
Nov. 7,	Tuesday	Election Day.
Nov. 15,	Wednesday	Quarterly Examinations, High School.
Nov. 30,	Thursday	Thanksgiving Day.
Dec. 8,	Friday	Immaculate Conception, Holiday.
Dec. 20,	Wednesday	Christmas Recess begins, 12 M.
Dec. 21,	Thursday	Condition Examinations.

1917

Jan. 4,	Thursday	Class Exercises resumed, 8:50 A.M.
Jan. 24,	Wednesday	Examinations.
Jan. 30,	Tuesday	Entrance Examinations.
Feb. 1,	Thursday	Second Term begins.
Feb. 22,	Thursday	Washington's Birthday. High School Contest in Elocution.
Mar. 25,	Sunday	Contest for the Grady Medal for Oratory.
Apr. 14,	Saturday	Quarterly Examinations, High School.
Apr. 3,	Tuesday	Easter Recess begins, 2:50 P. M.
Apr. 4,	Wednesday	Condition Examinations.
Apr. 11,	Wednesday	Class Exercises resumed, 8:50 A.M.
May 15,	Tuesday	Feast of St. De La Salle, Holiday.
May 17,	Thursday	Ascension Day, Holiday.
May 30,	Wednesday	Decoration Day, Services for Deceased Alumni.
May 27-30,	Sunday-Wednesday	Annual Retreat for Graduating Classes.
June 9,	Saturday	Examinations.
June 15,	Friday	Commencement Exercises, High School.
June 17,	Sunday	Baccalaureate Sermon.
June 19,	Tuesday	Commencement Exercises, College. General Meeting of the Alumni Societies.

OFFICERS OF THE COLLEGE

BROTHER HENRY AUGUST
Chairman of Board of Trustees

BROTHER EDWARD
President

BROTHER JASPER
Registrar

BROTHER POTAMIAN
Secretary

BROTHER ANGELUS
Treasurer

HISTORY AND ORGANIZATION.

THE institution now known as Manhattan College was opened in 1849 as an academy for young men who desired advanced instruction. From its original location in Canal Street, it was transferred in 1853 to its present site, where it was known as the Academy of the Holy Infancy. In 1863, it was incorporated by the Regents of the University of the State of New York under its present title, and empowered to confer the usual academic degrees.

The College offers two departments of study, the Department of Arts and the Department of Civil Engineering. The courses in the former lead to the degrees of Bachelor of Arts and Master of Arts; in the latter, to the degrees of Bachelor of Science in Civil Engineering and Civil Engineer. The requirements for admission into both departments and the respective courses of study will be found on pages 10 and 20.

As the vernacular language and literature constitute an essential feature of a sound education, special attention is given in both departments to the study of English. The importance of the natural and experimental sciences is emphasized in the courses given in biology, physics, chemistry, and geology. These courses are of special benefit to students preparing for medical school. Of no less advantage for the prospective law student are the courses in logic and political and social science. For students who intend to embrace the teaching profession, there are offered courses in pedagogy and in the history and psychology of education.

Besides the College proper, there is a High School department. This department offers two courses—a modern language course and a business course. The former, which corresponds to the ordinary four-year high school course, prepares directly for college entrance; the latter, which offers two years of commercial work, may be elected after the completion of two years' work in a regular high school course.

In both the Collegiate and High School departments, every attention is bestowed on the moral and religious training of the student. Christian doctrine is taught in all the classes. Regular attention to religious duties is required of all students. Though the College is Catholic in its tone and teaching, non-Catholic students are received.

The Library contains nearly 11,000 volumes, and additions are regularly made to keep the general reference section abreast of modern development. In the College Reading Room, the best current periodicals are kept on file.

The College Museums offer adequate facilities for research work in zoology, botany, geology and mineralogy.

EXPENSES.

Resident Students	$350 00
Day Students, College	100 00
Day Students, High School	75 00
Luncheon at College	50 00
Use of laboratory and apparatus for any one course	10 00
Use of surveying instruments	10 00
Use of typewriter	10 00
Use of library	2 00
Music: piano, $80; mandolin, $50; violin, $50	
Graduation	10 00
Certificate	5 00
Condition examinations, each subject	2 00
Athletics (collected by the College for the Athletic Association)	5 00

For books and stationery, cash payment is required.

Payment for the half session of five months is required **in advance.**

Remittances from outside New York City are to be made by draft or by post-office order payable at Station J.

REQUIREMENTS FOR ADMISSION.

The requirements for admission conform to the standards prescribed by the Regents of the University of the State of New York.

One unit represents one year's daily work in school.

1. **English.**—The requirements in English are based on the recommendations of the National Conference on Uniform Entrance Requirements in English.

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence and appreciation.

ENGLISH GRAMMAR AND COMPOSITION

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted efforts of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

LITERATURE

The second object is sought by means of two lists of books, headed, respectively, *Reading* and *Study*, from which may be framed a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself

with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

A, READING

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to larger freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group 1.

Books to Be Read: 1915-19

Group 1

CLASSICS IN TRANSLATION (two to be selected). The *Old Testament*, comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the *Odyssey*, with the omission, if desired, of Books 1-5, 15-17; the *Iliad*, with the omission, if desired, of Books 11, 13-15, 17, 21; the *Æneid*. The *Odyssey*, *Iliad* and *Æneid* should be read in translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group 2

SHAKESPEARE (two to be selected). *Midsummer Night's Dream*, *Merchant of Venice*, *As You Like It*, *Twelfth Night*, *The Tempest*, *Romeo and Juliet*, *King John*, *Richard II*, *Richard III*, *Henry V*, *Coriolanus*, *Julius Cæsar*, *Macbeth*, *Hamlet*. (The last three plays if not chosen for study under B.)

Group 3

PROSE FICTION (two to be selected). Malory's *Morte d'Arthur* (about 100 pages); Bunyan's *Pilgrim's Progress*, Part I; Swift's *Gulliver's Travels* (voyages to Lilliput and to Brobdingnag); Defoe's *Robinson Crusoe*, Part I; Goldsmith's *Vicar of Wakefield;* Frances Burney's *Evelina ;* Scott's novels, any *one ;* Mrs. Gaskell's *Cranford ;* Kingsley's *Westward Ho !* or *Here-*

ward the Wake; Reade's *The Cloister and the Hearth;* Blackmore's *Lorna Doone;* Hughes' *Tom Brown's School Days;* Stevenson's *Treasure Island*, or *Kidnapped*, or *Master of Ballantrae;* Cooper's novels, any *one;* Poe's *Tales;* Hawthorne's *House of the Seven Gables*, or *Twice Told Tales*, or *Mosses from an Old Manse;* a collection of short stories by various standard writers.

Group 4

ESSAYS, BIOGRAPHY, ETC. (two to be selected). Addison and Steele's *Sir Roger de Coverley Papers*, or selections from the *Tatler* and *Spectator* (about 200 pages); selections from Boswell's *Life of Johnson* (about 200 pages); Franklin's *Autobiography;* selections from Irving's *Sketch Book* (about 200 pages), or *Life of Goldsmith;* Southey's *Life of Nelson;* selections from Lamb's *Essays of Elia* (about 100 pages); selections from Lockhart's *Life of Scott* (about 200 pages); Thackeray's lectures on Swift, Addison and Steele, in the *English Humorists;* Macaulay, any one of the following essays—*Lord Clive*, *Warren Hastings*, *Milton*, *Addison*, *Goldsmith*, *Frederick the Great*, *Madam d'Arblay;* selections from Trevelyan's *Life of Macaulay* (about 200 pages); Ruskin's *Sesame and Lilies*, or selections (about 150 pages); Dana's *Two Years Before the Mast;* selections from Lincoln, including at least the two Inaugurals, the Speeches in Independence Hall and at Gettysburg, the Last Public Address, the Letter to Greeley, together with a brief memoir; Parkman's *Oregon Trail;* Thoreau's *Walden;* selected essays of Lowell (about 150 pages); Holmes' *Autocrat of the Breakfast Table;* Stevenson's *An Inland Voyage* and *Travels with a Donkey;* Huxley's *Autobiography* and selections from the *Lay Sermons*, including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; a collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, Emerson, and later writers; a collection of letters by various standard writers.

Group 5

POETRY (two to be selected). Palgrave's *Golden Treasury* (*First Series*), Books 2 and 3, with special attention to Dryden, Collins, Gray, Cowper, and Burns; Palgrave's *Golden Treasury* (*First Series*), Book 4, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under B); Goldsmith's *The Traveller* and *The Deserted Village;* Pope's *The Rape of the Lock;* a collection of English and Scottish ballads; Coleridge's *The Ancient Mariner*, *Christabel*, and *Kubla Khan;* Byron's *Childe Harold*, Canto 3 or 4, and *The Prisoner of Chillon;* Scott's *The Lady of the Lake*, or *Marmion;* Macaulay's *Lays of Ancient Rome*, *The Battle of Naseby*, *The Armada*, *Ivry;* Tennyson's *The Princess*, or *Gareth and Lynette*, *Lancelot and Elaine*, and *The Passing of Arthur ;* Browning's *Cavalier Tunes*, *The Lost Leader*, *Good News from Ghent*, *Home Thoughts*, *Incident of the French Camp*, *Hervé Riel*, *Pheidippides*, *My Last Duchess*, *Up at a Villa*, *The Italian in England*, *The Patriot*, *The Pied Piper*, "*De Gustibus*"—, *Instans Tyrannus;* Arnold's *Sohrab and Rustum* and *The Forsaken Merman ;* selections from American poetry, with special attention to Poe, Longfellow, Lowell, and Whittier.

B, STUDY

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions.

Books to Be Studied: 1915-19

Group 1

DRAMA (one to be selected). Shakespeare's *Julius Cæsar*, or *Macbeth*, or *Hamlet*.

Group 2

POETRY (one to be selected). Milton's *L'Allegro*, *Il Penseroso*, and either *Comus* or *Lycidas ;* Tennyson's *The Coming of Arthur*, *The Holy Grail*, and *The Passing of Arthur ;* the selections from Wordsworth, Keats, and Shelley in Palgrave's *Golden Treasury*.

Group 3

ORATORY (one to be selected). Burke's *Speech on Conciliation with America ;* Macaulay's *Speeches on Copyright*, and Lincoln's *Speech at Cooper Union ;* Washington's *Farewell Address* and Webster's *First Bunker Hill Oration*.

Group 4

ESSAYS (one to be selected). Carlyle's *Essay on Burns*, with a selection of Burns' poems; Macaulay's *Life of Johnson;* Emerson's *Essay on Manners*

EXAMINATION

The examination will be divided into two parts, one of which (English 1) will be on grammar and composition, and the other (English 2) on literature.

In grammar and composition, the candidate may be asked to construe sentences, to parse individual words, and to correct mistakes in usage. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books listed above under *Reading*, from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose several subjects, perhaps eight or ten, will be indicated, from which the candidate may make his own selections.

The examination in literature will include: (1) General questions designed to test such a knowledge and appreciation of literature as may be gained by fulfilling the requirements defined under *Reading* above. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but this list will not be made the basis of detailed questions. (2) More particular questions upon the content, form, and structure of the books prescribed for *Study*, and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage. (3 units.)

2. History.—(a) Ancient History, and events down to 814 A. D.; (b) English History, or Mediæval and Modern History; (c) American History and Civics. (2 units.)

3. Elementary Algebra. — Algebra through quadratics. The four fundamental operations, factoring, fractions, ratio, proportion, simple equations, radicals, quadratic equations, and problems involving quadratics. (1 unit.)

4. Intermediate Algebra.—Review of elementary algebra together with the following: The four fundamental operations for rational algebraic expressions, fractions, radicals, quadratic equations, simple cases of equations with two or more unknown quantities, binomial theorem with finding of 4th term, imaginaries, meaning of exponents, evolution, theory of quadratic equations, arithmetical and geometric progressions, graphic interpretation of equations. (½ unit.)

5. **Plane Geometry.**—The usual theorems and constructions of standard text-books. Original exercises and numerical problems. (1 unit.)

6. **Solid Geometry.**—The usual theorems and constructions of standard text-books. Original exercises and numerical problems. (½ unit.)

7. **Plane Trigonometry.**—The subject as given in standard modern text-books. (½ unit.)

8. **French.**—Grammar, sight translation, and composition based upon the following books:

Fraser and Squair, *Shorter French Course;* Bierman and Frank, *Conversational Reader;* Mairet, *La Tâche du Petit Pierre;* Daudet, *Neuf Contes Choisis;* Enault, *Le Chien du Capitaine;* Patton, *Causeries en France;* Labiche, *La Grammaire;* Sarcey, *Le Siège de Paris;* Racine, *Esther;* Merimée, *Colomba.* (3 units.)

9. **German.**—Grammar, sight translation and composition based upon the following books:

Bagster-Collins, *First Year in German;* Hillern, *Höher als die Kirche;* Hauff, *Das Kalte Herz;* Wildenbruch, *Das Edle Blut;* Ebner-Eschenbach, *Krambambuli;* Storm, *Immensee;* Baumbach, *Der Schwiegersohn.* (2 units.)

10. **Chemistry.**—A course of at least sixty experiments made by the candidate, with note-book certified by the teacher. (1 unit.)

11. **Physics.**—Knowledge of the general principles of physics, and their applications. Each candidate must present a note-book containing a description of at least forty experiments which he has performed. (1 unit.)

> The following will be accepted in place of French and German:
>
> **Latin.**—Grammar, Allen & Greenough, or equivalent, including prosody. Cæsar, *Gallic War*, Books I-IV. Cicero, six orations. Reading at sight of a short passage

of easy Latin prose. Virgil, *Æneid*, Books I-VI. Latin prose composition. (4 units.)

Greek.—Grammar, Goodwin, or equivalent, including prosody. Xenophon, *Anabasis*, Books I-III. Homer, *Iliad*, Books I-III. Greek prose composition. (3 units.)

Students presenting Latin and Greek for admission will be required to take a special course in French and German during the Freshman year, and will thereafter follow the regular program.

A certificate of the Regents of the University of the State of New York, or of approved schools, will be received in lieu of the entrance examination, provided it has been issued within the year. The candidate will, however, be examined on such branches as are not included in this certificate.

Candidates for admission must present a certificate of good character.

GENERAL REGULATIONS.

Examinations.—Examinations for admission are held at the College on the two days preceding the opening of each term.

The regular College term examinations are held during the last week of January and the second week of June.

In case of illness, or for some other equally grave cause, a student may have his examination postponed.

Students absent for more than ten per cent. of the recitations in any subject will not be allowed to take the examination in that subject. Students absent on the two days following the Thanksgiving, Christmas, or Summer recesses, without permission, will be charged with two absences for each recitation missed.

For students who fail in the regular examinations, condition examinations are held at the College on the two days preceding the opening of the first term, and also on the first day of the Christmas and Easter recesses. Students are required to pay two dollars for an examination in each subject in which they are conditioned.

Rating.—The final standing of each student in any subject is determined by his examination results and his class-marks in that subject. Seventy per cent. constitutes a pass in each subject. A statement of the numerical standing of the student in each subject is sent to the parent or guardian at the close of each term.

Promotion.—No student will be allowed to take up Freshman work whose conditions on entrance exceed one and one-half units.* All entrance conditions must be removed before the beginning of Sophomore year.

No student will be allowed to take up Sophomore work whose failures in Freshman work exceed one and one-half units. No student will be allowed to take up Junior work whose failures exceed one unit in the work of the two previous years. No student will be allowed to take up Senior work who has any conditions.

Studies.—The studies of the course in civil engineering are prescribed throughout. In the Arts course, Freshman and Sophomore work is prescribed, and electives are offered in the Junior and Senior years. No elective course will be given unless there is a sufficient number of applicants.

Degrees.—Every candidate for a degree is required to present a typewritten thesis on a subject connected with his course. The subject selected must be submitted for approval to the Professor of the department to which it belongs, on or before February 1. Such help and guidance may be offered the candidate as the Professor may judge right, and the completed thesis shall be handed in for approval on or before May 30.

Theses in the Arts Department shall contain not less than two thousand words, and must be typewritten on paper 13x8, with a margin of an inch and one-half. Science theses must be accompanied by the necessary drawings and illustrations. All approved theses become the property of the College and are placed in charge of the Librarian.

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* A unit is five recitations a week for one year in any subject. Two hours of laboratory work or two hours of drawing are equivalent to one hour's recitation.

If a student fail to present his thesis, or if the thesis be rejected, he shall not be recommended for his degree.

At the discretion of the Faculty, a certificate of proficiency may be given to a student who has followed, under the direction of the Faculty, a special course of one or more subjects, and who gives evidence of satisfactory proficiency.

Honors.—Students who attain an average of ninety per cent. in all the subjects of their College course, will be graduated with *Honor*. They will be graduated with *Credit* if they attain an average of from eighty-five to ninety per cent. in all the subjects of their College course.

COURSE OF STUDY.

ARTS DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
English	(5)	52, 57	English	(5)	52, 57
Public Speaking	(1)	116	Public Speaking	(1)	116
French	(4)	63	French	(4)	63
German	(4)	69	German	(4)	69
History	(3)	74	History	(3)	75
Mathematics	(3)	90	Mathematics	(3)	89
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Religion	(2)	121	Religion	(2)	121

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
English	(5)	53, 58	English	(5)	53, 59
Public Speaking	(1)	117	Public Speaking	(1)	117
French	(4)	64	French	(4)	64
German	(4)	70	German	(4)	70
History	(3)	76	History	(3)	77
Chemistry	(1)	13	Chemistry	(1)	13
Chemical Laboratory	(3)	14	Chemical Laboratory	(3)	14
Religion	(2)	122	Religion	(2)	122

The figures in parentheses indicate the number of hours a week; the others indicate the paragraphs in which the course is outlined.

JUNIOR CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	54, 60	ENGLISH	(5)	55, 61
PUBLIC SPEAKING	(1)	118	PUBLIC SPEAKING	(1)	118
FRENCH	(3)	65	FRENCH	(3)	65
GERMAN	(3)	71	GERMAN	(3)	71
PHILOSOPHY	(4)	101, 102	PHILOSOPHY	(4)	106, 112
GEOLOGY	(4)	67	ASTRONOMY	(4)	1, 2
ECONOMICS	(2)	47	ECONOMICS	(2)	47
RELIGION	(2)	123	RELIGION	(2)	123

ELECTIVES.

FIRST TERM			SECOND TERM		
PEDAGOGY	(3)	97, 99	PEDAGOGY	(3)	97, 99
SPANISH	(3)	124	SPANISH	(3)	124
ITALIAN	(3)	87	ITALIAN	(3)	87
AMERICAN POLITICAL INSTITUTIONS	(1)	81	EUROPEAN CONSTITUTIONS	(1)	82
CHURCH HISTORY	(1)	86	CHURCH HISTORY	(1)	86

SENIOR CLASS.

FIRST TERM			SECOND TERM		
English	(4)	56, 62	English	(4)	56, 62
Public Speaking	(1)	119	Public Speaking	(1)	119
French	(2)	66	French	(2)	66
German	(2)	72	German	(2)	72
History of Philosophy	(2)	113	History of Philosophy	(2)	113
Philosophy	(4)	104, 105	Philosophy	(4)	103
Philosophy of History	(2)	85	Philosophy of History	(2)	85
Natural Theology	(2)	109	Ethics	(2)	110, 111

ELECTIVES.

FIRST TERM			SECOND TERM		
Pedagogy	(3)	98	Pedagogy	(3)	98
Biology	(3)	3	Biology	(3)	4
Biological Laboratory	(4)		Biological Laboratory	(4)	
Spanish	(2)		Spanish	(2)	125
Italian	(2)	88	Italian	(2)	88
Principles of Government	(3)	48	Sociology	(3)	51
Public Finance	(2)	49	Representative Government	(2)	50
American History	(2)	83	American History	(2)	84
History of the 19th Century	(1)	80	History of the 19th Century	(1)	80

COURSE OF STUDY.

CIVIL ENGINEERING DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
English	(2)	52	English	(2)	52
Public Speaking	(1)	116	Public Speaking	(1)	116
Mathematics	(6)	90, 91	Mathematics	(6)	89, 91
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Surveying	(3)	16	Surveying	(3)	16
Descriptive Geometry	(2)	42	Descriptive Geometry	(2)	42
Drawing	(4)	39, 40	Drawing	(4)	39, 40
Religion	(2)	121	Religion	(2)	121

Summer Field Work, Three Weeks, 36

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
English	(2)	53	English	(2)	53
Public Speaking	(1)	117	Public Speaking	(1)	117
Mathematics	(3)	92	Mathematics	(3)	92
Mechanics	(3)	94	Mechanics	(3)	94
Materials of Construction	(2)	22	Materials of Construction	(2)	22
Chemistry	(1)	13	Chemistry	(1)	13
Chemical Laboratory	(3)	14	Chemical Laboratory	(3)	14
Stereotomy	(3)	41	Surveying	(2)	17
Drawing	(3)	43	Graphic Statics	(2)	44
Surveying	(3)	17	Stereotomy	(2)	41
Religion	(2)	122	Drawing	(2)	43
			Religion	(2)	122

Summer Field Work, Three Weeks, 37

JUNIOR CLASS.

FIRST TERM

PHILOSOPHY	(2)	100
ENGLISH	(2)	54
PUBLIC SPEAKING	(1)	118
MASONRY CONSTRUCTION	(2)	21, 24
MECHANICS OF MATERIALS	(3)	29
RAILROAD ENGINEERING	(2)	18
DESIGN PROBLEMS	(5)	
ANALYTICAL MECHANICS	(2)	95
GEOLOGY	(4)	67
RELIGION	(2)	123
FIELD WORK		38

SECOND TERM

PHILOSOPHY	(2)	100
PUBLIC SPEAKING	(1)	118
MASONRY CONSTRUCTION	(2)	21, 24
TRUSSES	(3)	30
HIGHWAY ENGINEERING	(2)	19
TUNNELING	(2)	26
EXCAVATIONS	(2)	27
DESIGN PROBLEMS	(5)	45a
METALLURGY	(2)	15
ASTRONOMY	(4)	1, 2
RELIGION	(2)	123
FIELD WORK		38

SENIOR CLASS.

FIRST TERM

PUBLIC SPEAKING	(1)	119
BRIDGES	(6)	31
HYDRAULICS	(2)	33
SEWERS	(2)	28
CEMENT LABORATORY	(4)	25
DESIGN PROBLEMS	(6)	45b, 46
ECONOMICS	(2)	47
NATURAL THEOLOGY	(2)	109

SECOND TERM

PUBLIC SPEAKING	(1)	119
BRIDGES	(6)	31
CONTRACTS AND SPECIFICATIONS	(1)	32
RAILWAY TRACK AND TRACK WORK	(3)	20
WATER SUPPLY	(2)	34
CONCRETE	(4)	23
DESIGN PROBLEMS	(3)	46
ECONOMICS	(2)	47
ETHICS	(2)	110, 111
THESIS	(4)	

PEDAGOGY.

The regular College work in logic and psychology satisfies the requirements of both State and City Superintendents of Public Instruction, under whose immediate direction examinations in the history of education and in method are held. Upon completing a satisfactory examination in these subjects, the candidate receives a license to teach for three years, after which period, if successful experience can be demonstrated, the provisional license may be exchanged for a life certificate.

The main requisite is that the candidate be a graduate from a college or university recognized by the Regents of the University of the State of New York, wherein at least one year was spent in pedagogical study amounting to not less than 210 hours, with attendance upon lectures or recitations, as follows: logic or psychology, at least 90 hours; history and principles of education and methods of teaching, at least 120 hours.

The courses offered to the students in Pedagogy are:

Junior Year.—Logic, 60 hours.
Psychology, 90 hours.
History of Education and
Principles of Education, 90 hours.
Senior Year.—Method in teaching, 60 hours.
Observation, 20 hours.

PRE-MEDICAL COURSE.

To prepare students for entrance to medical schools, the college offers a special pre-medical course. The following studies are prescribed for one year:

Physics, six hours a week.
Chemistry, six hours a week.
Biology, six hours a week.
French or German, three hours a week.
English, two hours a week.
History, two hours a week.
Religion, two hours a week.

The requirements for admission to the pre-medical course are the same as the requirements for admission to the college course in arts or science.

HIGHER DEGREES.

Bachelors of Arts may obtain the Master's degree by pursuing an approved course of study and giving satisfactory evidence of scholarship. If such post-graduate study is not pursued in the College, the degree will not be conferred until two years after graduation.

Professional study, as such, does not entitle one to the Master's degree; but original research or special and scholarly study connected with a profession may, at the discretion of the Faculty, be accepted.

Essays, theses, and dissertations intended for the Master's degree must be presented at least one month before the end of the academic year, and must contain at least 3,000 words. The bibliography or list of works consulted must, in each case, be appended to the thesis.

If a candidate's thesis is approved, he will be informed as to the time when he will be required to meet the Board of Examiners for any further test of his qualifications which may be deemed necessary.

Bachelors of Science in Engineering may obtain the degree of Civil Engineer two years after graduation on the presentation of an approved thesis.

COURSES OF STUDY.

FOR THE MASTER'S DEGREE.

Master of Arts.

Any one of the following courses:

1. Moral Philosophy, with written thesis, making special application of its principles to mooted questions of the day.
2. Plato or Aristotle, with the history of his influence on modern thought.
3. A comparative study of the psychology of St. Thomas Aquinas and modern psychology.
4. A comparative study of Thomistic ethical principles and current theories.
5. A critical study of Locke's influence on modern philosophy.
6. A critical study of Kantianism.
7. A critical study, with practical applications, of any *one* of the following psychologic principles as applied in teaching:

   (*a*) Interest; (*b*) Apperception; (*c*) Attention; (*d*) Personal Equation; (*e*) Imitation; (*f*) Free Will; (*g*) Character; (*h*) Humor; (*i*) Imagination.
8. A critical examination of current errors in logic, psychology, or ethics.
9. A thoro criticism of any one of the accepted texts in logic, psychology, or ethics.
10. A critical examination of any one of the accepted texts in the history of education.
11. A critical study of the growth of the novel.

12. English literature. Critical analysis of any classic author from the Catholic standpoint.
13. French literature, with translations at sight from any classic author, and a critical French essay on his work or his age.
14. German literature, with translations at sight from any classic author, and a critical German essay on his work or his age.
15. Church History. Selections of important periods for research, with essays embodying results of investigation.
16. A discussion of current theories in political economy.
17. A critical examination of any one of the texts commonly accepted as standard in political economy.
18. A detailed examination with applications of the relations of political economy to ethics.
19. A critical study of Leo XIII.'s encyclicals on political, social, and economic questions.
20. Discussion of prevalent sociological theories.
21. Amplification of topics discussed by the Catholic Truth Society.

Master of Science.

Any one of the following courses:

1. Higher co-ordinate geometry of two dimensions; co-ordinate geometry of three dimensions.
2. General theory of equations.
3. Higher parts of the integral calculus; differential equations; calculus of variations.
4. Rigid dynamics.

5. Fourier's theorem and its applications.
6. The wave theory treated mathematically or experimentally, or both.
7. The electromagnetic theory of light.
8. Phenomena of interference, diffraction and polarization.
9. Spectrum analysis.
10. The electronic theory of matter.
11. Conservation and dissipation of energy.
12. Application of the doctrine of energy to the phenomena of chemical combination.
13. Thermal measurement of energy.
14. Properties and phenomena of the ether.
15. Discharge of electricity through gases.
16. Recent views on electricity.
17. Higher parts of static and dynamic electricity.
18. Phenomena of alternating currents.
19. Astrophysics.
20. Special studies in civil engineering.
21. Special studies in electrical engineering.

These subjects are merely suggestive, and are intended to assist the candidate in the choice of a subject for his thesis. The treatment of the subject should be thoro and comprehensive, and should embody the result of original thought or of experimental investigation, as the case may require.

Published works of the candidate on the subject selected, articles in reviews or scientific periodicals, or contributions to the transactions of learned societies will receive due consideration from the Board of Examiners.

DEPARTMENTS OF INSTRUCTION.

ASTRONOMY.

1. Descriptive Astronomy.—The dimensions of the earth, its mass and motions. Phenomena depending on the axial and the orbital motion of the earth. Determination of the figure and magnitude of the earth. Kepler's laws and applications. Phenomena depending on change of place. Fundamental principles of celestial mechanics. Dimensions and configuration of the solar system. The sun and planets. Tides, eclipses, transits.

Young, *Manual of Astronomy*.

2. Practical Astronomy.—Construction, adjustment and use of the sextant, transit, spectroscope and equatorial telescope. Determination of the meridian, latitude, and local time.

BIOLOGY.

3. Animal Biology.—The study by lecture and laboratory of important types of the principal phyla of the animal kingdom. The amœba, euglena, paramœcium, grantia, hydra, starfish, earthworm, crayfish, honey-bee, spider, locust, frog, and fish are studied in detail. The comparative structure of the birds and mammals, and adaptation to environment, are observed and discussed. Biologic principles and theories are treated from the historical and critical viewpoints. Emphasis is laid upon the economic importance of the more prominent species.

Osborne, *Economic Zoology*.

4. Plant Biology.—The life histories of typical species of plant life are observed and discussed in the laboratory and lectures. Principles governing the growth and development of the thallophytes, bryophytes, pteridophytes and sphermatophytes are emphasized. As much of the morphology of these plants as is necessary for a proper understanding of life functions is reviewed. The algæ, fungi, moss, fern, pine, corn, and a flowering plant are studied in detail.

Hall and Bergen, *Principles of Botany*.

5. Human Anatomy and Physiology.—Lectures, illustrated with charts, models, and lantern slides.

6. The Nervous System and Its Terminal Organs.—Lectures and illustrations, with charts, models, and lantern slides.

CHEMISTRY.

13. Qualitative Analysis.—Description of a method of separation which experience has proved to be sufficiently simple and accurate.

Noyes, *Qualitative Analysis*.

14. Laboratory Work.—Separation of the ordinary bases and acids.

Noyes, *Qualitative Analysis*.

15. Metallurgy of Iron and Steel.—Study of the physical and chemical properties as well as the constitution and manufacture of cast iron, wrought iron, and steel.

Stoughton, *The Metallurgy of Iron and Steel*.

CIVIL ENGINEERING.

16. Land Surveying.—Theory and general principles. Adjustment and use of instruments. Leveling; grading. Chain and compass surveying. Balancing, plotting, supplying omissions, and computing areas.

Tracy, *Plane Surveying.*

17. Land Surveying.—Topographical surveying by transit and stadia. Leveling, contour lines, plotting. Triangulation. Use of plane table, planimeter and sextant. Theory of simple curves, slope staking. City, hydrographic and mining surveying.

Breed and Hosmer, *Principles and Practice of Surveying.*

18. Railroad Engineering.—Reconnaissance, preliminary, and location surveys. Simple, compound, parabolic and spiral curves. Turnouts and crossings. Computation of earth work.

Allen, *Railroad Curves and Earthwork.*

Reference books: Kurtz, *Modern Location of Standard Turnouts;* Talbot, *The Railway Transition Spiral.*

19. Highway Engineering.—Preliminary Investigations. Surveying and mapping. Design, drainage, and foundations. Earth, sand-clay, gravel, and broken-stone roads. Bituminous materials and various methods for using in roads. Penetration and mining methods. Wood block, stone block, brick, and concrete pavements. Street cleaning and snow removal. Car tracks, sidewalks, bridges.

Blanchard and Drownes, *Text-book on Highway Engineering.*

20. Railway Track and Trackwork.—Roadbed construction, Ballast, Ballasting, Ties, Tie plates, Rails, Rail renewals, Rail fastenings, Rail joints, Track-laying, Switches, Frogs, Turnouts, Crossings, Sidings, Yards, Terminals, Fences, Cattleguards, Handling and clearing snow, Bridge floors, Miscellaneous structures, Tools, Supplies, Signs, Signals, Interlocking systems, Electric railways, Organization of maintenance-of-way department, Trackwork of maintenance, Gages, Grades, Curves, Drainage, Ditching, Inspection of track, Premium system, Bridge inspection, Permanent improvements, Wrecking trains, Records, Reports, Accounts.

Tratman, *Railway Track and Trackwork.*

21. Foundations.—Bearing power of soils; foundations in rock; foundations in compressible soils; reinforcing the soil with piles. Sand, wood, steel, concrete piles; pile driving and determination of the bearing power of piles. Foundations in water; cofferdams, cylinders, pneumatic caissons.

Baker, *Masonry Contruction.*

22. Materials of Construction.—Stones: quarrying, working, employment. Bricks: manufacture and employment. Production and testing of lime, hydraulic lime, and cement; mortar; concrete; timber; metals; miscellaneous materials.

23. Plain and Reinforced Concrete.— Composition and treatment. Characteristics and properties of concrete mixtures. Mixing and laying concrete. Waterproofing; preservation; fire protection. General theory of flexure in reinforced concrete. Practical calculations and designing of slabs, T beams, simple and compound footings, piles, retaining walls. Building of forms. Bars used in concrete. Transporting and depositing.

Webb and Gibson, *Reinforced Concrete.*

Turneaure and Maurer, *Principles of Reinforced Concrete Construction.*

24. Masonry Structures.—Theory of the slope of earth embankments; graphical and analytical methods for determining earth-pressure as well as the thickness of retaining-walls and dams. Arches. Masonry culverts and bridges.

Prelini, *Earth Slopes, Retaining Walls, and Dams.*

25. Cement History.— Natural and Portland cement. Raw materials, method of manufacture, uses. Standard methods of testing. Determination of specific gravity. Time of set. Fineness, soundness, tensile strength, mortars, storage of test pieces. Method of chemical analysis. Interpretation of results.

Mead, *Portland Cement.*

26. Tunneling.—Timbering and lining of tunnels. Excavation of tunnels through rock, and through loose and treacherous soils. Subaqueous tunnels. Open cut. Subways. Ventilation of tunnels.

Prelini, *Tunneling.*

27. Excavations.—Earthwork, excavations by hand and machine, rock excavation, hauling on horizontal and inclined roads, hoisting cableways, trench cutting, embankment constructions, dredging and dredging materials.

Prelini, *Earth and Rock Excavation.*

Prelini, *Dredges and Dredging.*

28. Sewers and Sewage Disposal.—Different sewerage systems. Amount of sewage. Run-off and storm water. Size and material of sewers. Manholes, catch basins, flushing tanks, etc. Sewage disposal by dilution. Mechanical and chemical clarification of sewage. Sewage treatment by septic tanks, contact beds, sprinkling filters, etc. Sewage disposal by irrigation.

Folwell, *Sewerage Systems.*

29. Mechanics of Materials.—Resistance and elasticity of materials, cantilever, simple and continuous beams, columns, torsion and shafts, stresses, resilience, tension and compression, flexure in beams, shear and torsion, true and apparent stresses, design and construction of beams in wood and steel, design of girders.

Merriman, *Mechanics of Materials.*

30. Theory of Trusses.—Truss elements, loads and reactions for trusses of various designs, influence lines, and position of loads for maximum bending movement. Wheel-loads and conventional systems of analysis, stress-strain diagrams, secondary stresses in trusses, applications to highway and railroad bridges.

Merriman and Jacoby, *Roofs and Bridges.* Part I. (begun.)

31. Roofs, Bridges, and Buildings.—Different classes of bridges: riveted truss bridge, lattice bridge, pin-connected bridge. Design of details for roofs and bridges, floor systems, lateral and transverse bracing. The plate girder in detail. Complete designs, with estimate of cost for structure and erection. Lectures on the design of roof trusses, plate girders and truss bridges.

Merriman and Jacoby, *Roofs and Bridges.* Part I. (completed); Part III.

32. Contracts and Specifications.—The law of contracts. General specifications; special clauses in engineering specifications. The study and draughting of complete contracts and specifications.

Johnson, *Contracts and Specifications.*

33. Hydraulics.—Flow of water through orifices and over weirs, gauging of weirs. Flow of water in canals. Formulæ for discharge of water from locks. Motion of water in pipes. System of pipes. Gauging water in rivers. Rainfall and run-off. Pumps and pumping. Merriman, *Hydraulics*.

34. Water Supply and Irrigation.—Analysis of water. Amount of water required. Sources of supply. Gravity systems. Intakes, reservoirs, aqueducts and distributing systems. Pumping. Sedimentation. Slow sand filtration. Mechanical filtration. Ozone, hypochlorite, and other methods of purification. Water softening. Details of construction and estimates of cost. Drainage areas, rainfall, evaporation. Reservoir construction. Dams for storage. Regulators. Velocity of flow and dimensions of canals. Distributing and lateral canals.

35. Inspection Visits.—Visits to engineering works and manufacturing establishments.

36. Field Work.—Compass and transit surveys. Farm survey. Leveling, profile, grading.

37. Field Work.—Triangulation. Topographical surveying with transit and stadia. Locating contours. Simple curves.

38. Field Work.—Reconnaissance and preliminary survey of railroad. Location of line. Profile and cross-section. Computation of earth work. About two miles of road are run, and the students make all calculations required in the regular routine of office work.

DRAWING.

39. Mechanical Drawing.—Use of instruments, geometrical problems, lettering, plans, elevations.

40. Mechanical Drawing.—Elementary projections, intersections, shades and shadows. Tinting drawings, pen-and-ink sketching.

41. Stereotomy.—Stone-cutting and its application to culverts, sewers, etc. Tracing and blue-prints.

42. Descriptive Geometry.—Demonstrations and execution of a series of plates.

Anthony and Ashley, *Descriptive Geometry*.

43. Drawing.—Plots of survey, topographical maps, contour maps, profiles.

44. Graphic Statics.—Resolution of concurrent and non-concurrent forces; determination of moments, of internal stresses, of centroids and moments of inertia. Application to roofs and trusses.

Merriman and Jacoby, *Graphic Statics*.

45a. Design Problems.—Graphic solution of problems concerning the slope of embankments, earth pressure against retaining-walls and dams; stability of retaining-walls, dams and arches. Design of a masonry bridge with plan, elevation, longitudinal and cross-sections.

45b. Design Problems.—Series of plates of graphical determinations of stresses in girders and trusses.

46. Bridge Design.—Design of roof trusses and fixed steel bridges. Drawbridges. Elevated steel structures. Skeleton of a steel building. Computations and working drawings are made from specifications for railroad bridges of assigned spans, and estimates of weight prepared.

ECONOMICS, SOCIAL AND POLITICAL SCIENCE.

47. Economics.—Principles of production, distribution, exchange, money, banking, international trade-relation of labor and capital, present organization of industry, currency legislation of the United States. Economic history of England and America.

Seager, *Economics*, *Briefer Course*.

48. Principles of Government.—Legislation, the judiciary, the executive, suffrage, and finance.

Wilson, *The State.*

49. Public Finance.—Sources of state income. Development, classification, incidents and effects of principal taxes.

Adam's *Science of Finance.*

50. Representative Government in the United States and other countries.

51. Sociology.—Psychology of social types. Historical aspects of social organization, both ancient and modern. Study of modern social problems.

ENGLISH.

52. English Composition.—The principles of composition; the structure of the paragraph and the sentence; the forms of prose composition. Versification. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *Composition: Oral and Written.*

53. English Composition.—Advanced work in the forms of prose composition and in the study of prose diction. Versification. Analysis of illustrative selections. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *A College Manual of Rhetoric.*

54. Advanced Argumentation.—The principles of argumentation; analysis of arguments; study of the rules and tests of evidence; theory and practice of brief-drawing. One argumentative essay of considerable length developed from formal brief.

Pattee, *Practical Argumentation.*

55. American Literature.—An intensive study of American literature from the Colonial period to the present time. Special stress on the poetry and prose of the nineteenth century, and on the Catholic writers of America. Assigned readings and reports.

Christian Brothers, *American Literature.*

56. Literary Criticism.—A study of the fundamental principles of literature and style; practice in construction; reports on assigned readings; application of the principles of literary criticism to English and American authors.

Winchester, *Principles of Literary Criticism.*

57. History of English Literature.—An outline course in the history of English and American literature, accompanied by a study of masterpieces illustrating the several literary periods.

Christian Brothers, *English Literature.*

For reading and study: *The Prologue to the Canterbury Tales*, *Richard III.*, *Twelfth Night*, *Pilgrim's Progress*, *The Rape of the Lock*, Addison's Essays, *Childe Harold*, Canto IV., *The Idylls of the King*, *The Second Spring*, *Kenilworth*, *Fabiola*, *The Marble Faun*, selections from American poetry.

58. The Drama.—The development of the drama in England, with special emphasis upon the Elizabethan drama. The following plays are read and discussed: *Everyman*, *Edward II.*, *A Midsummer Night's Dream*, *Richard II.*, *Hamlet*, *The Tempest*, *The Alchemist*, and *The Rivals.*

59. English Literature of the Seventeenth and Eighteenth Centuries.—An outline history of the literary movements from the rise of Puritanism to the opening of the nineteenth century. Study of selected works of Milton, Pope, Addison, Goldsmith, and Burke. Considerable matter assigned for private reading. Lectures, recitations, and reports.

60. English Poetry of the Nineteenth Century.—Wordsworth and his contemporaries; Tennyson, Browning, and the Victorian era; American poetry. The literary history of the period is outlined by lecture. Considerable poetry is assigned for private reading.

Brother Azarias, *Books and Reading*.

Ward, *English Poets*, Vol. IV.

61. English Prose of the Nineteenth Century.—The essayists; the development of the novel in the nineteenth century. Lectures; discussions; themes; assigned readings.

Brother Azarias, *Books and Reading*.

For reading and study: Selected essays of Newman, Lamb, De Quincey, Carlyle, and Emerson. *David Copperfield*, *The Mill on the Floss*, *Diana of the Crossways*, *Callista*, *Lorna Doone*.

62. Philosophy of Literature.—Origin and function of literature; influencing agencies in literature; characteristics of ancient and modern literature. The literary artist.

Brother Azarias, *Philosophy of Literature*.

FRENCH.

63. Intermediate.—Review of grammar; practice in speaking and writing French.

Fraser and Squair, *French Grammar;* Newson, *French Daily Life;* Bazin, *Les Oberlé;* Dumas, *La Question d'Argent;* Hugo, *Ruy Blas;* Chateaubriand, *Extraits*.

64. Advanced.—Practice in speaking and writing French.

Mansion, *French Composition;* France, *Le Livre de mon Ami;* Lamartine, *Méditations;* Coppée, *Le Luthier de Crémone*, *Le Trésor;* Rostand, *La Princesse Lointaine.*

65. Seventeenth Century.—Prose and classic drama. Bossuet, *Choix de Sermons et d'Oraisons;* Corneille, *Cinna*, *Le Cid;* Molière, *Le Misanthrope;* La Fontaine, *Fables;* Racine, *Andromaque.*

66. The History of French Literature.—The outlines of French literature. Lectures, assigned readings chiefly from authors of the eighteenth and nineteenth centuries.

Doumic, *Histoire de la Littérature Française.*

GEOLOGY.

67. General Geology.—Lectures and recitations. The following topics are discussed: Origin of the earth; external and internal processes and the land produced by them; organisms as rock makers; a brief history of the earth, organic and inorganic.

Scott, *Introduction to Geology.*

GERMAN.

69. Intermediate.—Review of grammar; reading; oral and aural practice.

Thomas, *German Grammar;* Keller, *Kleider Machen Leute;* Hauff, *Lichtenstein;* Freytag, *Soll und Haben;* Schiller, *Wilhelm Tell;* Goethe, *Hermann und Dorothea.*

70. Advanced.—Oral and aural practice reading; prose composition; syntax.

Thomas, *German Grammar;* Pope, *Writing and Speaking German;* Tombo, *Deutsche Reden;* Freytag, *Bilder aus der deutschen Vergangenheit;* Gore, *German*

Science Reader; Heine, selections; Lessing, *Minna von Barnhelm;* Schiller, *Die Jungfrau von Orleans.*

71. The German Drama.—The classic drama; the romantic school; modern German drama. Essays in German. Oral and aural practice.

Pope, *Writing and Speaking German.*

The following plays will be studied in class: Lessing, *Nathan der Weise;* Goethe, *Iphigenie;* Schiller, *Maria Stuart* and *Wallenstein's Tod;* Kleist, *Prinz von Homburg;* Grillparzer, *Der Traum ein Leben;* Fulda, *Unter vier Augen, Der Talisman.*

72. The History of German Literature.—Outlines of the history of German literature. Lectures and discussions. Reading assigned by the instructor.

Stroebe and Whitney, *Geschichte aus der deutschen Literatur;* Thomas, *German Anthology.*

HISTORY.

74. Ancient History.—History of Greece, with special reference to its literature, politics and commerce.

75. Ancient History.—Rome, from the founding of the City to the fall of the Western Roman Empire, with special reference to literature, politics and commerce.

76. Medieval History.—From the fall of the Western to the fall of the Eastern Roman Empire. The Holy Roman Empire and the Papacy receive special attention.

77. Modern History.—The principal subjects studied are the revival of learning, the age of discovery, the Reformation in England, France and Germany, the Thirty Years' War, the age of Louis XIV., the French Revolution, the nineteenth century.

80. The History of the Nineteenth Century.—This course treats principally of the restoration of the Bourbons, the Revolutions of 1830 and 1848, the Austro-Prussian war, the Franco-Prussian war, the unification of Germany and of Italy.

81. American Political Institutions.—Nature of state and national systems; organization and powers of legislative, executive, and judicial departments of Federal Government.

82. European Constitutions.—Political institutions of England and Switzerland as compared with those of the United States.

83. Constitutional History of the United States.—Colonial governments, the confederation, the federal constitution, national vs. state sovereignty.

84. Constitutional History of the United States.—War of 1812, federal judiciary, nullification act, state constitutions, the Civil War.

85. The Philosophy of History, based principally on the works of Balmes, Schlegel and Allies.

86. Church History.—From the founding of the Church to the Protestant Reformation, based on the works of Allies, Montalembert, Mann, Janssen, and Pastor. Illustrated lectures including the history and geography of the Holy Land.

ITALIAN.

87. Elementary Course.—Grammar, composition, reading.

Marinoni, *Italian Grammar and Italian Reader;* De Amicis, *Cuore;* Manzoni, *I Promessi Sposi.*

88. Dante.—

The *Vita Nuova;* the *Divina Commedia.*

MATHEMATICS.

89. Algebra.—Advanced algebra.

Hawkes, *Advanced Algebra.*

90. Trigonometry.—Plane and spherical.

Wentworth, *Plane and Spherical Trigonometry.*

91. Analytical Geometry.—General equation of the second degree; straight line, plane, surfaces of revolution.

Nichols, *Analytical Geometry.*

92. Calculus.—Differential and integral, with application to geometry, mechanics, engineering, and physics.

Osborne, *Differential and Integral Calculus.*

MECHANICS.

94. Mechanics.—Principles of statics and dynamics.

Maurer, *Technical Mechanics*, Part I.

95. Analytical Mechanics.—Statics of concurrent and parallel forces, theory of couples, friction, mass-moments. Theorems of Guldinus. Work and energy. Impulsive forces. Angular velocity and acceleration. Simple harmonic motion. Centroids of surfaces and solids. Moments of inertia, with application to engineering problems. The conical and the ordinary pendulum. Pressure due to gravitating liquids, center of pressure, equilibrium of floating bodies.

Bowser, *Analytical Mechanics.*

Bowser, *Hydromechanics.*

PEDAGOGY.

97. Principles of Education.—The educative process. The physical, mental, and moral laws upon which education is based. Aims and ideals of Catholic education. The teacher and his qualifications. School organization, hygiene and discipline. Aids to teaching.

Thorndike, *The Principles of Teaching;* Ruediger, *Principles of Education;* Shields, *The Psychology of Education;* Bagley and Colvin, *Human Behavior;* Horne, *Psychological Principles of Education.*

98. Methods in Teaching.—Meaning of instruction and its relation to education. The psychologic and logical views of knowledge. The psychologic basis of method. Its general principles. The function of the recitation. The conduct of the recitation.

Collar and Crook, *School Management and Methods of Instruction;* Brothers of the Christian Schools, *Elements of Practical Pedagogy;* Strayer, *Brief Course in the Teaching Process;* Freeman, *The Psychology of the Common Branches.*

99. History of Education.—Study of the educational thought and practice of the ancient nations. Early Christian education; medieval education; scholasticism; the universities. Influence of the Renaissance and the Reformation on educational ideas. The religious orders. Realism; naturalism; the psychologists; the sociological movement. Rise of modern school systems. Problems of present-day education.

McCormick, *History of Education;* Graves, *A History of Education;* Monroe, *Text-Book in the History of Education.*

PHILOSOPHY.

100. Introduction to Philosophy.—A general view of the field of philosophy; its principal problems. The more important philosophical systems.

Dubray, *Introductory Philosophy.*

101. Formal Logic.—The idea. Errors as to the nature of ideas in modern English and German philosophy. Definition. Division. The nature of judgment. The value of the syllogism.

Turner, *Lessons in Logic;* Brothers of the Christian Schools, *Elementary Course in Philosophy.*

102. Method.—General principles. Special methods. Deduction and induction. Methods of observation. Methods of explanation.

Jevons, *Lessons in Logic;* Brothers of the Christian Schools, *Elementary Course in Philosophy.*

103. Epistemology.—The possibility of certainty. Scepticism. Veracity of the senses and the intellect. Idealism vs. Realism. Universals. Authority and belief. Critical examinations of various theories of knowledge.

Poland, *The Truth of Thought.* Rickaby, *First Principles of Knowledge.*

104. Metaphysics.—The Aristotelian transcendentals. Reality of substances. Causation. Errors concerning causation. Final causes.

Brothers of the Christian Schools, *Christian Philosophy.*

105. Cosmic Philosophy.—Nature, origin, and duration of the universe. Ultimate constituents of bodies. Theory of matter and form. Laws of nature. Possibility of miracles. The concepts of natural science and scholastic philosophy.

Brothers of the Christian Schools, *Christian Philosophy.*

106. Psychology.—Rational vs. experimental psychology; value of each. Faculty, habit and action. The life principle. Vegetative Life. Theory of sensation. Qualities of sensation. Intellection. Attention. Apperception. Association of Ideas. Evolutionism. Heredity. Freedom of will. Spirituality and immortality of the soul.

Maher, *Psychology.*

107. The Psychology of Education.—A study of mental development. The psychological basis of education and of methods of teaching. Refutation of prevalent errors in educational psychology.

109. Natural Theology.—Proof of God's existence and providence—Deism, pantheism, agnosticism, atheism. Existence of evil. Preservation of creatures. Divine concurrence.

Brothers of the Christian Schools, *Cours de Philosophie.*

110. General Ethics.—Nature of a human act. Ultimate end of human actions. Determinants of morality. Does the end justify the means? Hindrances to the perfection of a human act. The passions, habit, virtue, vice.

Brothers of the Christian Schools, *Cours de Philosophie.*

111. Special Ethics.—Man's rights and duties as an individual. Man's duties to God—Adoration, love, obedience. Man's duties to his neighbor as regards soul

and body. Man's duties to himself as to soul and body. Suicide and duelling.

Man's rights and duties as citizen. The state. Its constituent elements. Its origin, end, scope, and limits.

Common law of nations. Peaceful relations among nations.

Ecclesiastical society. The Church—Its orgin and constitution. Its ends and limits. Its superiority to the the state. Its mission to the modern world.

Brothers of the Christian Schools, *Cours de Philosophie.*

112. Experimental Psychology.—Elements and general methods. Elements of mental life; sensation, feeling, conation. Experiments on the outer senses and on the association of ideas, with special application to pedagogy.

Seashore, *Elementary Experiments in Psychology.*

113. History of Philosophy.—Principles of the great founders of Ancient Schools; their vitality as illustrated in modern views. History of medieval philosophy. History of modern philosophy. The Neo-Scholastic movement.

Turner, *History of Philosophy.*

PHYSICS.

114. Mechanics.—Matter and energy. Kinematics; rectilinear, curvilinear, and periodic motion. Dynamics; laws of motion, work and energy, rotation, equilibrium, elasticity, machines. Mechanics of fluids; molecular phenomena in fluids, density and specific gravity, fluids in motion, properties of gases.

Light.—Laws of propagation, velocity and intensity of light. Photometry. Reflection and refraction; formation of images by mirrors and lenses. Spectrum analysis and study of optical instruments.

Heat.—Temperature and its measurement. Expansion of solids, liquids and gases. Change of state. Conduction, convection, radiation and absorption of heat. Vapor tension. Latent heat and specific heat. Relation between heat and work; energy, actual and potential.

Sound.—Production and propagation, velocity, reflection and refraction. Simple cases of resonance and interference. Intensity, pitch and quality. Transverse vibrations of strings. Longitudinal vibration of columns of air and of rods; vibrations of plates and membranes. Determination of pitch and wave-length. Doppler's principle and applications.

Electricity and Magnetism.—Fundamental phenomena of static electricity; general laws of distribution and induction. The Leyden jar and other condensers. Influence machines. Atmospheric electricity. Use of quadrant electrometer. Primary and secondary batteries; electromotive force, strength of current, division of current in a network of conductors. Ohm's law and applications. Magnetic, thermal and chemical effects of the current. Laws of electrolysis. Measurement of current and resistance. The electromagnet. Current induction, induction by magnets, the induction coil, discharge in low and high vacua. Continuous-current dynamo and motor; the alternator. The electric transmission of energy. Electric lighting. Thermo-electric currents. Telegraphy and telephony. Wireless telegraphy.

Permanent magnets and molecular theory; magnetic induction; the magnetic circuit. Comparison of magnetic fields. Theory and use of the magnetometer and dip-circle. Terrestrial magnetism and determination of the magnetic elements; magnetic charts.

Carhart, *College Physics*.

Physical Laboratory.—Study of the magnetic field due to a magnet and combination of magnets. Curve of free magnetism. Law of the inverse square. Comparison of magnetic moments. The ratio $\frac{M}{H}$ also the product $M \times H$. Determination of magnetic dip. Laying out the meridian; magnetic declination. Measurement of electromotive force, resistance of conductors, and capacity of condensers. Battery resistance and current strength. Measurements relating to storage batteries. Use of the tangent galvanometer, ammeter and voltmeter for direct and alternating currents; the wattmeter and electrodynamometer; the copper voltameter. Quantitative estimate of heat development in a circuit.

PUBLIC SPEAKING.

116. Oral Interpretation.—A study of the elements of vocal expression. Correctness and distinctness of utterance. The study and delivery of selections and short original speeches.

Winan, *Public Speaking*.

117. Oral Interpretation.—A study of the principles of attention, emotion, gesture. Delivery of selections and original speeches.

Winan, *Public Speaking*.

118. Argumentative Oratory.—Principles of persuasion and belief. Methods of delivery. Delivery of selections and original orations.

Winan, *Public Speaking*.

119. Public Address.—Delivery of original compositions.

RELIGION.

121. Dogma.—Explanation of the principal dogmas, with special insistence on the continuity of the Church. The Church and science. Objections. History of the Old Testament.

Christian Brothers' *Manual of Christian Doctrine*, Part I.

122. Moral.—Explanation of the fundamental principles of Christian morality as contained in the decalogue. History of the New Testament.

Christian Brothers' *Manual of Christian Doctrine*, Part II.

123. Worship.—Grace, prayer, and the sacraments, with special references to the Council of Trent and the tenets of Protestantism. History of the Church.

Christian Brothers' *Manual of Christian Doctrine*, Part III.

SPANISH.

124. Elementary.—Grammar, reading, composition. De Vitis, *Spanish Grammar;* De Haan and Morrison, *Cuentos Modernos*. Alarcon, *El Capitán Veneno;* Valera, *El Pajaro Verde*.

125. Intermediate.—Reading, conversation, composition.

Ford, *Spanish Composition;* Cervantes, *Don Quijote;* Pereda, *Pedro Sánchez;* Moratin, *El Si de las Ninas*.

126. Advanced.—Composition, conversation. Calderon, *El Principe Constante; La Vida es Sueno;* Lope de Vega, *La Estrella de Sevilla*.

MANHATTAN COLLEGE HIGH SCHOOL.

The aim of the High School is to prepare for admission to college. The studies conform to the *Syllabus for Secondary Schools* of the New York State Education Department.

The requirements for admission are the preliminary studies prescribed by the Education Department. The most favorable time for entrance is at the beginning of the scholastic year. The regular examinations for admission take place on the two days immediately preceding each term.

The classes are frequently examined, and students are not allowed to pass from one subject to another until they have given evidence of adequate knowledge of the subject. A student who shows by the results of the examinations that he is unable to keep up with his class will be placed in a lower grade.

The Inspector examines weekly the record of every pupil, and comments upon it before the professors and students of the class.

Summarized reports of the examinations are forwarded to the parents at the end of each quarter.

Since each report shows the exact standing of the student, it should be carefully examined by his parent or guardian.

Percentages are rated as follows: From 90 to 100, excellent; from 80 to 90, very good; from 70 to 80, good; under 60, unsatisfactory.

Promotions are based on the joint results of the quarterly examinations and the daily marks. No student will be promoted unless he attains an average of at least 60 per cent. in each subject, and a general average of 70 per cent.

Students who fail to get the average required in any subject may present themselves for examination on the two days immediately preceding the reopening in September. A fee of one dollar is required for each subject examined.

At least three hours a day should be given to the preparation of class work.

The active co-operation of parents with the faculty is essential to the progress of the student. Parents are therefore requested to insist upon regular attendance and careful preparation of class work.

Punctuality at all sessions and recitations is required.

In all cases of absence a written excuse from parents or guardian is required. This excuse will not be accepted in lieu of omitted class work.

Wednesday and Saturday afternoons are the regular weekly half-holidays.

Students who live in the College may not leave the grounds without authorization.

COMMERCIAL DEPARTMENT.

Students who desire to prepare for mercantile life will find every facility in the Commercial Department. This department comprises two years' work, and no student is admitted until he has satisfactorily completed the studies of the *second year* of high school.

The students receive a thoro course in standard business methods and in the science of accounts. A complete course in commercial arithmetic is given, and ample opportunity is afforded for the practice of shorthand and typewriting.

The Commercial course does not, however, confine its work to purely business branches. Subjects of general culture are also included. English composition and letter-writing receive special attention. The student is required to treat prescribed subjects in a manner that will enable him to write with ease and elegance. Questions relating to political economy and commercial law are discussed in the class-room in order to give the student correct ideas on the vital questions of daily life. Weekly lessons are given in the art of public speaking, in order that the student may acquire an easy and graceful delivery.

Students who complete the Commercial course receive a certificate as a guarantee of their fitness for mercantile employment.

COURSE OF STUDY—HIGH SCHOOL.

FIRST YEAR.

ENGLISH. (5)—Hanson, *Two Years' Course in English Composition.*
Stevenson, *Treasure Island;* Coleridge, *The Ancient Mariner;* Parkman, *Oregon Trail.*

ALGEBRA. (5)—Through Quadratics.
Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;*
Bierman and Frank, *Conversational Reader.*

BIOLOGY. (5)—Peabody and Hunt, *Elementary Biology.*

ELOCUTION. (1)

DRAWING. (2)—*Syllabus for Secondary Schools*, pp. 380-384.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Dogma.*

SECOND YEAR.

ENGLISH. (3)—Hanson, *Two Years' Course in English Composition;* Irving, *Sketch Book;* Shakespeare, *Merchant of Venice;* Hawthorne, *Twice-Told Tales;* Goldsmith, *The Deserted Village.*

ELOCUTION. (1)

PLANE GEOMETRY. (5)—Wentworth, *Plane Geometry.*

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* Figures in parentheses indicate the number of recitations a week.

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Daudet, *Neuf Contes Choisis;* Labiche et Martin, *La Poudre aux Yeux;* Mairet, *La Tâche du Petit Pierre.*

GERMAN. Bagster-Collins, *First Book in German;* Bacon, *Vorwärts.*

ANCIENT HISTORY. (3)—Wolfson, *Essentials in Ancient History.*

DRAWING. (2)—*Syllabus for Secondary Schools*, pp. 384-385.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Moral.*

THIRD YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric; The Sir Roger de Coverley Papers;* Shakespeare, *Henry V;* Dickens, *A Tale of Two Cities;* Tennyson, *Gareth and Lynette*, *Launcelot and Elaine* and *The Passing of Arthur.*

ELOCUTION. (1).

SOLID GEOMETRY (First Term). (4)—Wentworth, *Solid Geometry.*

INTERMEDIATE ALGEBRA (Second Term). (4)—Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Enault, *Le Chien du Capitaine;* Labiche, *La Grammaire;* Sarcey, *Le Siége de Paris;* Racine, *Esther;* Pattou, *Causeries en France.*

GERMAN. (5)—Bagster-Collins, *First Book in German;* Hillern, *Höher als die Kirche;* Wildenbruch, *Das Edle Blut;* Ebner-Eschenbach, *Krambambuli;* Storm, *Immensee.* Oral and aural practice.

PHYSICS. (5)—Carhart and Chute, *First Principles of Physics;* Chester, Dean, Timmerman, *Laboratory Manual of Physics.*

DRAWING. (1)—*Syllabus for Secondary Schools*, pp. 385-386.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Worship.*

FOURTH YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric;* Burke, *Speech on Conciliation with America;* Miton, *L'Allegro*, *Il Penseroso*, *Comus;* Macaulay, *Life of Johnson;* Shakespeare, *Macbeth.*

ELOCUTION. (1)

TRIGONOMETRY. (2)—Wentworth, *Plane and Spherical Trigonometry.*

FRENCH. (4)—Fraser and Squair, *Shorter French Course;* Lamartine, *Jeanne d'Arc;* Hugo, *Hernani;* Racine, *Athalie;* Pattou, *Causeries en France.*

GERMAN. (4)—Riehl, *Der Fluch der Schönheit;* Baumbach, *Der Schwiegersohn;* Elster, *Zwischen den Schlachten;* Boezinger, *Erstes Aufsatzbuch.*

AMERICAN HISTORY AND CIVICS. (5)—Hart, *Essentials in American History;* Boynton, *School Civics.*

CHEMISTRY. (5)—Brownlee, *First Principles of Chemistry;* Brownlee, *Laboratory Exercises.*

DRAWING. (1)—*Syllabus for Secondary Schools*, p. 386.

RELIGION. (2)—Christian Brothers' Series, No. 4. Complete.

COMMERCIAL COURSE.

For First and Second Years see pages 56 *and* 57.

THIRD YEAR.

ENGLISH. (3)—See English, p. 57.

ELOCUTION. (1)

CIVICS. (2)—See Civics, p. 59 (above).

COMMERCIAL LAW. (3)—Richardson, *Commercial Law.*

FRENCH. (5)—See French, p. 58.

or

GERMAN. (5)—See German, p. 58.

or

SPANISH. (5)—See Spanish, No. 124.

SHORTHAND. (5)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

TYPEWRITING. (2)—Smith, *A Practical Course in Touch Typewriting.*

COMMERCIAL ARITHMETIC. (4)—Moore and Miner, *Practical Business Arithmetic.*

RELIGION. (2)—See Religion, p. 58.

FOURTH YEAR.

ENGLISH. (3)—See English, p. 58.

ELOCUTION. (1)

POLITICAL ECONOMY. (3)—Laughlin, *Elements of Political Economy.*

FRENCH. (5)—See French, p. 58.

or

GERMAN. (5)—See German, p. 59.

or

SPANISH. (5)—See Spanish, No. 125.

SHORTHAND AND TYPEWRITING. (6)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

BOOKKEEPING. (5)—Montgomery, *Bookkeeping and Business Practice.*

RELIGION. (2)—See Religion, p. 59.

PRIZES AND MEDALS.

COLLEGE.

1. A purse of $50 is awarded by the Alumni Society to the best English essayist of the graduating class. The prize contest consists of two essays, one prepared and the other extemporaneous. The subject of the first is announced at the beginning of the month of October, and the essay must be presented not later than the second Tuesday of April. The subject of the second is announced when the candidates are assembled to write the essay.

2. The Milmo-McGowan Medal for religious instruction was founded by Mrs. B. McGowan, in memory of her son, Mr. Michael J. McGowan, '69. This medal is awarded on competitive examination on the subject matter of the four years' course in Christian doctrine and church history. The examination takes place at the end of May.

3. The Kelly Medal for philosophy, offered to the students of the Senior Class, was founded by the late Mr. Eugene Kelly, of New York City. This medal is awarded for proficiency in logic, metaphysics, and psychology.

4. The Grady Memorial Medal for oratory was founded by the Alumni Society in memory of Rev. John M. Grady, '69. The contest for this medal is open to all College students.

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* In all cases in which "record" determines the award, failure in a regular examination eliminates the candidate.

5. The Brennan Medal for the Philosophy of History is awarded to the student of the Senior Class who obtains the highest average in this subject. The donor of this medal is The Hon. John F. Brennan, LL.D.,'75.

6. The Medal for Pedagogy is awarded to the student who obtains the highest average in this subject during Junior and Senior years.

7. The Cohalan Medal for civil engineering, the gift of Hon. Daniel F. Cohalan, LL.D., '85, in memory of his father, is awarded to the Senior student who has the highest record for the year in the civil engineering course.

8. The Develin Medal for French, founded by Mr. Charles E. Miller, of New York City, in honor of his friend, Mr. John E. Develin, is awarded by competitive examination on the matter of the four years' College course.

9. The Radford Medal for Natural Science is offered by the Alpha Beta Sigma to the student who has the highest average in Natural Science during his College course.

10. The Doelger Medal for German, the gift of Mrs. Doelger, in memory of the late Peter Doelger, is awarded to the student who has the highest record for the four years' College course in German.

HIGH SCHOOL.

1. The Medal for Elocution is awarded by competition among the students of the High School Department.

2. The Medal for Excellence is awarded to the pupil who has the highest general average for the fourth year of the High School course.

3. The Brother Charles Memorial Medal, donated by

the Commercial Alumni Society, is awarded to the student of the Commercial Department who has the highest record for proficiency throughout the course.

4. The Kean Medal for Christian doctrine, donated by the Rt. Rev. Mgr. John J. Kean, LL.D., '66, is open to all students of the Commercial Department.

5. The Pommerer Medal, donated by William C. Pommerer, M. A., '91, is awarded to the student of the graduating class who passes the best examination in shorthand and typewriting.

COLLEGE SOCIETIES.

THE APOSTLESHIP OF PRAYER and LEAGUE OF THE SACRED HEART.

The Apostleship of Prayer and League of the Sacred Heart is established in the College and High School departments to foster among the students the spirit of piety, to enable them to acquire more thoroly the spirit of Christianity, and to kindle in them zeal for works of reparation towards our Divine Lord.

The Communion of Reparation is made every first Friday, and the morning offering and daily "decade" form a part of the regular class exercises. Devotions in honor of the Sacred Heart are held in the College chapel on the first Friday of each month.

THE ARCHCONFRATERNITY OF THE HOLY CHILD JESUS.

This Archconfraternity has been erected in the chapel of the Brothers of the Christian Schools at Bethlehem. To it belong pupils of the Brothers' schools thruout the world. Its end is to obtain from Heaven thru the Divine Child Jesus: 1st, That God may have the first place in all the studies in educational establishments; 2nd, that teacher and pupils may be everywhere free to observe the laws of Holy Church without any restraint whatever; 3rd, that Catholic children may not be exposed to lose their faith in schools where God is not recognized. The Archconfraternity publishes a quarterly review entitled, *Little Messenger of the Divine Infant.*

MANHATTAN COLLEGE ALUMNI SOCIETY.

The object of the Society is to keep alive among the Alumni a sentiment of affection for their Alma Mater, and to unite the graduates of successive years by a common tie of fellowship.

There are three reunions of the Society each year; at the Alumni dinner, at the Memorial Mass on Decoration day, and at the reception of the newly graduated class on Commencement day.

OFFICERS.

President	HON. PETER A. SHEIL, '96
First Vice-President	JOSEPH A. DILLON, M. D., '87
Second Vice-President	JOHN J. MCBRIDE, '01
Third Vice-President	JOHN J. CURTIN, '00
Secretary	JOHN F. BROSNAN, '11
Treasurer	REV. JOHN T. JORDAN, '98
Historian	REV. BROTHER CHRYSOSTOM, '81

COMMERCIAL ALUMNI SOCIETY.

The Manhattan Commercial Alumni Association was organized September 5, 1901. Two meetings are held yearly.

OFFICERS.

President	WILLIAM C. POMMERER, '91
First Vice-President	JAMES F. KELLY, '05
Second Vice-President	CHRISTOPHER M. LEONARD, '10
Secretary	THOMAS P. HALE, '12
Treasurer	JAMES A. SMYTH, '08
Historian	BERNARD J. KEARNEY, '08

DE LA SALLE LITERARY SOCIETY.

This Society is confined to the students of the Senior year. The end proposed is the free discussion of questions pertaining to philosophy, which have been suggested, but not fully treated in the class-room. The Professor of Philosophy acts as Moderator.

Officers.

President	Joseph A. Corbalis
Vice-President	Gerald V. Cruise
Secretary	William B. Tigue
Treasurer	James A. Gregory
Historian	Thomas J. O'Connor

NEWMAN LITERARY SOCIETY.

The members of the Junior Class form this Society. The exercises, consisting of original essays and debates on literary or other subjects, are held weekly. The Professor of English Literature acts as Moderator.

Officers.

President	Patrick J. McEntegart
Vice-President	Hugh J. Carroll
Secretary	Louis C. Heilman
Treasurer	James T. Brennan
Critic	Francis J. Noonan

HUGHES LITERARY SOCIETY.

This Society consists of the students of the Sophomore year. Meetings are held twice a month, the principal exercises of which are debates on historical and scientific subjects, and on questions of the day, as well as essays on various topics. The senior Professor of the class is Moderator of the Society.

Officers.

President........................Thomas F. Sullivan
Vice-President....................David J. Martin
Secretary........................George C. Shannon
Treasurer..........................Arthur C. Mayer
Critic...............................Denis C. Quinn

McCLOSKEY LITERARY SOCIETY.

This Society, composed of the members of the Freshman Class, holds its regular meeting every week. The exercises consist principally of debates on various subjects and essays on literary and historical topics. The Professor of English literature is Moderator of the Society.

Officers.

President...........................John J. Manning
Vice-President...................Edward J. Noonan
Secretary...........................Leo. C. Fennelly
Treasurer...........................Francis P. Kenny

HAYES LITERARY SOCIETY.

The students of the Fourth Year High School have formed a literary society, which they have named after the Rt. Rev. Patrick J. Hayes, '88, Auxiliary-Bishop of New York. They hold regular weekly meetings, and sometimes class exercises, to which the College students are invited. The senior Professor of the class acts as Moderator.

Officers.

President	Arthur E. Whalen
Vice-President	Bernard A. McEntegart
Secretary	John J. Ryan
Treasurer	Lawrence F. Keane

FARLEY LITERARY SOCIETY.

This Society is composed of the Senior students of the Commercial Department. Literary exercises and discussions of questions pertaining to business and commerce constitute the program for the weekly meetings. The Principal of the Department acts as Moderator.

Officers.

President	James A. Nolan
Vice-President	James Kearsing
Secretary	Alfred J. O'Brien
Treasurer	William J. Quinn
Critic	William E. Fisher

THE MANHATTAN COLLEGE ENGINEERING SOCIETY.

Membership in this Society is limited to students of engineering in the Junior and the Senior classes. Meetings are held bi-weekly, at which papers are read by students and discussed by students and instructors.

President	Francis J. Downing, '16
Vice-President	John J. O'Donnell, '17
Secretary	Benjamin J. Hickey, '16
Treasurer	James A. Houlihan, '17

MANHATTAN COLLEGE ATHLETIC ASSOCIATION.

President	Thomas J. Quinlan, '16
Vice-President	Patrick J. McEntegart, '17
Secretary	Alfred J. O'Brien, Coml., '16
Treasurer	Frank J. Downing, '16
Manager, Baseball	Francis J. Sweeny, '16
Manager, Basketball	Daniel J. Begley, '16
Manager, Track	Edward B. O'Connor, '16
Manager, Tennis	Benjamin J. Hickey, '16

Press Committee: Edward T. McNierney, '17; James A. McEntegart, '17; Albert X. Bader, '18

Executive Committee: Rev. Brother Matthew, Rev. Brother Azarias, Edward A. Hanrahan, '06, Joseph T. Houlihan, '09, Thomas J. McEntegart, '12, Thomas J. Quinlan, '16.

COLLEGE PUBLICATIONS.

THE MANHATTAN QUARTERLY.

The *Manhattan Quarterly* is a literary magazine published by the students of Manhattan during the months of January, April, July, and October. Its object is to encourage among the students literary composition of a high order of merit, and to serve as a link between former students of Manhattan and their Alma Mater, by keeping them in touch with the leading thought of the College and of the Alumni Society.

Staff.

Editor-in-Chief—Thomas J. O'Connor, '16.
Associate Editors—Thomas J. Quinlan, '16;
Chales J. Power, '17.
Exchange Editors—William B. Tigue, '16;
Thomas F. Sullivan, '18.
Alumni Editor—José M. Ferrer, M. D., '76.
Athletics—William J. Dwyer, '16;
James V. O'Reilly, '19.
Current Topics—Edward B. O'Connor, '16.
Business Managers—Gerald V. Cruise, '16.
John J. O'Donnell, '17.

THE NEWS-LETTER.

The *News-Letter* was founded in 1900, mainly thru the energy of Dr. José M. Ferrer, '76, and the generosity of members of the Alumni Society. It is published monthly from October to June. The chief object of the publication is to give College news, and also items of interest concerning graduates of the various departments.

THE JASPER CHRONICLE.

The *Jasper Chronicle* in a semi-monthly newspaper published by the students of the College. Its purpose is to furnish current College news, to encourage literary activity among the students, and to add life and vigor to the different College activities.

EDITORIAL STAFF.

Editor-in-Chief—THOMAS F. SULLIVAN.
Associate Editors—FRANCIS J. MAHONEY,
GEORGE C. SHANNON,
J. RAYMOND RYAN,
DENIS C. QUINN.
Business Manager—FRANCIS J. NOONAN.
Assistant Business Managers—DAVID J. MARTIN,
ROLAND J. MCAULIFFE.

REGISTER OF STUDENTS—1915-1916.

ABREU, SIXTO E.	Habana, Cuba.
BADER, ALBERT X	New York.
BARRY, BERNARD J	New York.
BARRY, JOHN A	New York.
BARRETT, WILLIAM E.	Long Island City, N. Y.
BOTTO, VINCENT D.	Memphis, Tenn.
BECKER, JOSEPH W.	Detroit, Mich.
BEGLEY, DANIEL J.	New York.
BERAUD, ALBERT J.	Jersey City, N. J.
BLAKE, GEOFFRY M.	New York.
BOLAND, RAYMOND J	New York.
BOLAND, WILLIAM J	New York.
BORGES, ANTONIO	Celia Delgade, P. R.
BOWE, THOMAS J	New York.
BRADY, THOMAS E.	Brooklyn, N. Y.
BRENNAN, JAMES T	Stamford, Conn.
BRENNAN, WILLIAM	New York.
BRUNS, JOHN F	Stapleton, S. I., N. Y.
BURKE, WILLIAM F	Buffalo, N. Y.
BYRNE, MICHAEL J	New York.
CAPOZZI, JOSEPH A.	New York.
CAROLAN, WILLIAM	Brooklyn, N. Y.
CARROLL, FRANCIS X	New York.
CARROLL, HUGH J	New York.
CASEY, WILLIAM P	New York.
CASHMAN, EDWARD J	New York.
CASSIDY, MORTIMER M	New York.
CICERARO, RAFAEL	Havana, Cuba.
CINCOTTI, FREDERICK	New York.
CLEMENS, RICHARD J	Wappinger Falls, N. Y.
COCHRAN, FRANCIS W	New York.
COLEMAN, THOMAS F	Central Falls, R. I.
CONLON, TERENCE F	New York.
CONNOLLY, JOHN F.	New York.
CONWAY, WILLIAM E	New York.
CORBALIS, CHARLES L	Yonkers, N. Y.
CORBALIS, JOSEPH A	Yonkers, N. Y.
COROMINA, ANTHONY	Barcelona, Spain.

COSTELLO, MAURICE J.	New York.
COTILLO, IGNATIUS	New York.
COYLE, FARRELL D.	Lawrence, Mass.
CREED, FRANCIS J	New York.
CREGAN, MICHAEL A.	New York.
CRUISE, GERALD V.	New York.
CRUISE, PHILIP J	New York.
CURTIN, WILLIAM A.	New York.
DALTON, JOSEPH F.	Yonkers, N. Y.
DARDEN, JAMES	New York.
DEGNAN, JAMES J	New York.
DEL BELLO, BERNARD N.	Yonkers, N. Y.
DEL BELLO, SYLVESTER W.	Yonkers, N. Y.
DEVANNY, CHARLES J.	New York.
DIAZ, JOSE	Havana, Cuba
DIEDRICH, ARTHUR V.	Detroit, Michigan.
DILLON, JOSEPH V.	New York.
DILLON, VERNON S.	Skaneateles, N. Y.
DODD, ARTHUR R.	New York.
DONNELLY, JOHN J	New York.
DONOHUE, JAMES A.	Yonkers, N. Y.
DONOHUE, RAYMOND A.	New York.
DORANTES, RAFAEL	New York.
DOTTERWEICH, JOSEPH A	Buffalo, N. Y.
DOWNING, FRANCIS J	Buffalo, N. Y.
DOWD, JOSEPH	Brooklyn, N. Y.
DRISCOLL, EUGENE J	New York.
DRISCOLL, PATRICK J	New York.
DUGGAN, STANISLAUS	New York.
DUNNE, JOHN J	Riverdale, N. Y.
DWYER, WILLIAM J	New York.
ECCLES, JOHN B.	Yonkers, N. Y.
FANNING, FRANCIS R.	New York.
FARRELL, VINCENT J	East Orange, N. J.
FENNELLY, LEO C	New York.
FISHER, WILLIAM E.	New York.
FLANAGAN, JOHN.	New York.
FLOOD, JEREMIAH J	New York.
FLYNN, JOSEPH	New York.
FOGARTY, JOHN J	Peekskill, N. Y.

FONDA, JAMES D	New York.
FRYER, JOHN F	New York.
FULLAM, MARTIN A	New York.
GALATI, PHILIP J.	New York.
GARDELLA, LOUIS	New York.
GARGUILO, DEWEY J	New York.
GAROFALO, ANTHONY R.	New York.
GIBBONS, EDWARD T	Providence, R. I.
GILL, EDWARD F	New York
GONDA, JAMES D	Yonkers, N. Y.
GOULD, HERBERT A	New York.
GRADY, JAMES M	New York.
GREENE, JAMES J	New York.
GREGORY, JAMES A	New York.
HACKETT, JOHN F	New York.
HAGAN, LE ROY	New York.
HANIFIN, JOSEPH J	New York.
HANNAN, EDMUND D	New York.
HANNAN, JOHN P.	New York.
HAYES, GEORGE J	New York.
HAYES, JOHN J	New York.
HEFFERNAN, GEORGE W	New York.
HEILMAN, LOUIS C	New York.
HEITEFUSS, OSCAR H.	New York.
HICKEY, BENJAMIN J	New York.
HIGGINS, WILLIAM V	New York.
HILDERBRAND, JOHN F	New York.
HIRSCHMAN, JAMES J	New York.
HOLLAND, JOSEPH F.	Newark, N. J.
HOPKINS, RICHARD R	New York.
HORAN, JOHN J	New York.
HOULIHAN, GERALD	New York.
HOULIHAN, JAMES	New York.
HOULIHAN, JOHN	New York.
HOWLETT, PAUL M	Buffalo, N. Y.
HUBBARD, WILLIAM	Danbury, Conn.
HULIHAN, GEORGE J	Rutland, Vt.
JOYCE, EDWARD J	Elmhurst, L. I., N. Y.
KANE, LEO J	Yonkers, N. Y.
KEANE, LAWRENCE F	New York.

KEARSING, JAMES G	New York.
KELLY, ARTHUR A	New York.
KELLY, HOWARD A	New York.
KELLY, JOHN J	New York.
KELLY, THOMAS A	New York.
KELLY, WILLIAM V	Brooklyn, N. Y.
KENNEDY, JOHN M	Burmont, Pa.
KENNEDY, RAYMOND V	New York.
KENNEY, FRANCIS P.	Yonkers, N. Y.
KEOGH, JOHN J	New York.
KILLEEN, HENRY S	Buffalo, N. Y.
KILLEEN, THOMAS J	Buffalo, N. Y.
LEDDY, EDWARD W	New York.
LEE, EDWARD M.	Yonkers, N. Y.
LEE, THOMAS J.	New York.
LIMA, GUSTAVO M	Vieques, Porto Rico.
LINDENSTAD, EDMUND.	New York.
LOGUE, FRANCIS J	New York.
LOUGHRAN, JOHN C	New York.
LYONS, JAMES	Orange, N. J.
LYNCH, FRANK	New Brighton, N. Y.
McAULIFFE, ROLAND J	New York.
McBREEN, THOMAS J	New Brighton, N. Y.
McBRIDE, PETER F	New York.
McCANN, LAWRENCE E	New York.
McCONNELL, ARTHUR J	New York.
McCONVILLE, BERNARD R	New York.
McCORKEN, EDWARD L.	New York.
McDERMOTT, ARTHUR J.	New York.
McENTEGART, BERNARD J	New York.
McENTEGART, BERNARD A	New York
McENTEGART, JAMES A	New York.
McENTEGART, PATRICK J	New York.
McHUGH, JOHN F.	New York.
McLAUGHLIN, EDWARD J.	New York.
McLAUGHLIN, JOHN E	New York.
McMAHON, LEONARD J	Danbury, Conn.
McNIERNEY, EDWARD T.	Newark, N. J.
MAHONEY, FRANCIS J	New York.
MAJOR, JOHN W	New York.

MANGAN, DANIEL C	Brooklyn, N. Y.
MANNING, HAROLD A	New York
MANNING, JOHN J	New York.
MANNING, JOSEPH S	New York.
MARTIN, DAVID J	New York.
MARTIN, ROBERT T	New York.
MAYER, ARTHUR C	New York.
MIGUEL, ADOLFO DE.	Havana, Cuba.
MIRA, JULIUS.	New York.
MIRA, RICHARD	New York.
MITCHELL, HARRY V	New York.
MULCAHY, ROBERT G	New York.
MULLERY, MICHAEL J	New York
MULLIGAN, THOMAS J	New York.
MURRAY, EDWIN M	New York.
NICHOLS, ROBERT H	New York.
NOLAN, JAMES A	Brentwood, L. I., N. Y.
NOLAN, JAMES H	Providence, R. I.
NOONAN, FRANCIS J	New York.
NOONAN, EDWARD J	New York.
NORTON, JOSEPH J	New York.
O'BRIEN, ALFRED J	New York.
O'BRIEN, JOHN A	New Rochelle, N. Y.
O'BRIEN, WILLIAM J	New York.
O'CONNOR, EDWARD B	New York.
O'CONNOR, FRANCIS J	New York.
O'CONNOR, THOMAS J	New York.
O'DONNELL, JOHN J	New York.
O'DORAN, JOHN J.	Staten Island, N. Y.
O'FLYNN, CHARLES J	New York.
O'KEEFE, JOHN J.	New York.
O'LEARY, FRANCIS J	Yonkers, N. Y.
O'REILLY, JAMES V	New York.
O'REILLY, JOHN J	New York.
OVALLE, PHILIP	Colombia, S. A.
OVALLE, RICHARD	Colombia, S. A.
PARIS, GABRIEL	New York.
PASOS, ROBERTO.	New York.
PENNEFATHER, ARTHUR G	New York.
POWER, CHARLES S	New York.

PRIAL, FRANCIS B.	New York.
QUINLAN, THOMAS J	New York.
QUINN, DENIS C	New York.
QUINN, JOHN J	New York.
QUINN, JOHN J	New York.
QUINN, WILLIAM D	New York.
QUINN, WILLIAM J	New York.
RADIGAN, JOSEPH	New York.
RAHILL, EDWARD J	Buffalo, N. Y.
REGAN, CYRIL V	New York.
REID, AUGUST	New York.
REILLY, THOMAS J	Providence, R. I.
RETALEATO, LOUIS J	New York.
RIORDAN, DANIEL J	Buffalo, N. Y.
ROGAN, JOHN J	New York.
RUSTIA, VINCENTI	Manila, P. I.
RYAN, JAMES R	Hoboken, N. J.
RYAN, JOHN J	New York.
RYAN, WILLIAM F	New York.
SABATELLO, ANTONY	New York.
SABBATINO, RALPH J	Brooklyn, N. Y.
SARTINI, VICTOR	New York.
SCALLION, WALTER V	New York.
SCHULTE, JOHN T	Astoria, L. I., N. Y.
SCULLY, ALBERT F	New York.
SEXTON, FRANCIS A	New York.
SEXTON, JAMES J	New York.
SHANNON, GEORGE C	New York.
SICREE, ALBERT J	New York.
SMITH, GEORGE A	Central Islip, N. Y.
SPINELLI, MICHAEL	New York.
STALB, JOSEPH G	New York.
STANLEY, FRANCIS A	New York.
STAUBLE, VICTOR	Trinidad, W. I.
STEUER, HARRY J	New York.
STRAKER, VARLEY B	New York
SULLIVAN, DENNIS R	Providence, R. I.
SULLIVAN, JOHN J	New York.
SULLIVAN, THOMAS F	New York.
SWEENY, FRANCIS J	New York.

SWEENY, JOHN A.	New York.
TIGUE, WILLIAM B.	Port Jervis, N. Y.
TIMONEY, JOHN V.	New York.
TOWLE, FELIX S.	New York.
TUBBS, WILLIAM H.	New York.
WALSH, JOHN P.	New York.
WHELAN, ARTHUR B.	New York.
WHITE, JAMES J.	New York.
WILKINS, HENRY J.	New York.
WILLIAMS, EDWARD	New York.
WINTERS, EDWARD P.	New York.
YUMET, JOSE M.	Aguadilla, P. R.
ZIMMERMAN, AUGUSTINE M.	New York.
ZIVI, FRANCIS J.	New York.
ZURMUHLEN, FREDERICK H.	New Brighton, S. I., N. Y.

SIXTY-SECOND - - - ANNUAL

COMMENCEMENT
of
MANHATTAN COLLEGE

The Right Reverend Patrick J. Hayes, D. D., '88
AUXILIARY BISHOP OF NEW YORK
PRESIDING

CARNEGIE HALL

Tuesday, June Fifteenth, 1915

ORDER OF EXERCISES

OVERTURE—"Poet and Peasant" - - *Von Suppe*
ORCHESTRA

THE COMPENSATIONS OF WAR - - Thomas Joseph Gray

VOCAL QUARTET—"Ave Maria" - - *Mascagni*
MANHATTAN ALUMNI QUARTET

THE INDUSTRIAL COMPENSATIONS, William H. Loughran, Jr.

SELECTION—"Mikado" - - - - *Sullivan*
ORCHESTRA

THE SOCIAL COMPENSATIONS - Richard John Barry

a) MELODIE—"Un Peu d'Amour" - - *Silesu*
b) SELECTION—"When You're Away" - *Herbert*
ORCHESTRA

THE RELIGIOUS COMPENSATIONS, George Joseph Connolly

VOCAL QUARTET—"Jolly Fellow" - *Rhys-Herbert*
MANHATTAN ALUMNI QUARTET

CONFERRING OF DEGREES.

GRANTING OF COMMERCIAL DIPLOMAS

AWARDING OF PRIZES

ADDRESS TO THE GRADUATES

THE HONORABLE WILLIAM C. REDFIELD
Secretary of Commerce of the United States

MARCH—" The Stars and Stripes Forever " - - *Sousa*
ORCHESTRA

HONORARY DEGREE OF DOCTOR OF LAWS

THE HONORABLE THOMAS W. CHURCHILL
President of the Board of Education of the City of New York

HONORARY DEGREE OF MASTER OF ARTS

DANIEL W. COUGHLIN, EX-'97

DEGREE OF BACHELOR OF ARTS

FRANCIS ADAM FRITZ, *with honor*
LORENZ JOSEPH BROSNAN, *with credit*

RICHARD JOHN BARRY
FREDERICK WILLIAM EIERMANN
THOMAS JOSEPH GRAY
DANIEL JAMES HOULIHAN, JR.
DANIEL JOSEPH MURPHY
THOMAS RAYMOND OWENS
WILLIAM JOSEPH RYAN

DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

WILLIAM MELCHOIR HAUCK, *with honor*
MATHIAS HERMAN WEIDEN, *with honor*

GEORGE JOSEPH CONNOLLY
JOHN JOSEPH COSTA
CHARLES JOSEPH DALTON
FREDERICK FRANCIS FARACI
BERNARD JEROME FARRELL
RENE MARIUS GENTHON
WILLIAM HENRY LOUGHRAN, JR.
WOOLSON FRANCIS MCCORMACK
JOSEPH ALOYSIUS MCENTIRE
THOMAS BASIL MURRAY

Raymond St. Clair O'Connor
Francis Joseph O'Mara
Francis Xavier Scanlan
James Leo Smith
William Philip Smith

COMMERCIAL DIPLOMAS.

Walter Edward A. Blakemore
James Aloysius Cavanagh
Thomas Joseph Connors
John Joseph Foley
Paulino Lopez Fuentes
Joseph Edmund Haugh
George Leopold Leclercq
Patrick Stephen Mason
Thomas James McGee
Hugh Joseph Nolan
Robert Xavier Quinn
Patrick Anthony Ward

PRIZES

The Alumni Prize of Fifty Dollars for the best English Essay

Awarded to GEORGE J. CONNOLLY
Next in Merit, Francis A. Fritz
Founded by the Alumni Society of Manhattan College

Purse of Fifty Dollars for Experimental Physics

Awarded to GEORGE C. SHANNON
FREDERICK H. ZURMÜHLEN Ex-æquo
Next in Merit, John J. Keogh
Donated by the Alpha Sigma Beta

The Milmo McGowan Medal for Religious Instruction

Awarded to FRANCIS X. SCANLAN
Next in Merit, William M. Hauck
Founded by Milmo McGowan, New York

The Kelly Medal for Philosophy

Awarded to FRANCIS A. FRITZ
Next in Merit, DANIEL J. MURPHY
Founded by Eugene Kelly, New York

The Brennan Medal for the Philosophy of History

Awarded to FRANCIS A. FRITZ
Next in Merit, WILLIAM J. RYAN
Donated by the Hon. John F. Brennan, LL.D., '75

The Grady Medal for Oratory

Awarded to RICHARD J. BARRY
Next in Merit, THOMAS J. QUINLAN
Founded by the Alumni Society of Manhattan College

The Cohalan Medal for Civil Engineering

Awarded to JOHN J. COSTA
Next in Merit, WILLIAM M. HAUCK
Donated by the Hon. Daniel F. Cohalan, LL.D., '85
in Memory of Mr. Timothy Cohalan

HIGH SCHOOL DEPARTMENT

The Medal for Excellence

Awarded to JOHN J. ROGAN
Next in Merit, JOHN F. FRYER
Donated by Dr. Raymond P. Sullivan, M. A., '03

The Medal for Elocution

Awarded to JOHN J. ROGAN
Next in Merit, MORTIMER M. CASSIDY
Donated by John J. Curtin, M. A., '00

The Brother Charles Medal for Excellence in the Commercial Department

Awarded to PATRICK S. MASON
Next in Merit, Walter E. Blakemore
Donated by Mrs. Mary Doelger

The Kean Medal for Christian Doctrine in the Commercial Department

Awarded to JOSEPH E. HAUGH
Next in Merit, Patrick S. Mason
Donated by the Rt. Rev. Mgr. John J. Kean, LL.D., '66

The Pommerer Medal for Stenography and Typewriting

Awarded to JAMES E. HAUGH
Next in Merit, Thomas J. McGee
Donated by William C. Pommerer, M. A., '91

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FORM OF BEQUEST

TO

Manhattan College

I give and bequeath to MANHATTAN COLLEGE, NEW YORK CITY, the sum of

_________________________________dollars to be expended by the trustees in such manner as seems to them most useful to the College.

Manhattan College

New York

Catalogue 1917 - 1918

Catalogue

of

Manhattan College

and

Manhattan College High School

NEW YORK

CONDUCTED BY

The Brothers of the Christian Schools

1917-1918

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JOHN CRE
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Calendar for 1917

JANUARY.

S	M	T	W	T	F	S
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Calendar for 1918

JANUARY.

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SEPTEMBER.

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OCTOBER.

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NOVEMBER.

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DECEMBER.

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COLLEGE CALENDAR

		1917	
Sept.	6-8,	Thursday-Saturday	Registration.
Sept.	8-9,	Monday-Tuesday	Condition and Entrance Examinations.
Sept.	12,	Wednesday	Class Exercises begin.
Oct.	12,	Friday	Columbus Day.
Oct.	22-24,	Monday-Wednesday	Annual Retreat.
Nov.	1,	Thursday	All Saints' Day, Holiday.
Nov.	6,	Tuesday	Election Day.
Nov.	14,	Wednesday	Quarterly Examinations, High School.
Nov.	29,	Thursday	Thanksgiving Day.
Dec.	8,	Saturday	Immaculate Conception, Holiday.
Dec.	20,	Thursday	Christmas Recess begins, 2:55 P.M.
Dec.	21,	Friday	Condition Examinations.
		1918	
Jan.	3,	Thursday	Class Exercises resumed, 8:50 A.M.
Jan.	23,	Wednesday	Examinations.
Jan.	30,	Wednesday	Examinations for Applicants to Advanced Standing.
Feb.	1,	Friday	Second Term begins.
Feb.	22,	Friday	Washington's Birthday.
Feb.	24,	Sunday	High School Contest in Public Speaking.
Mar.	24,	Sunday	Contest for the Grady Medal for Oratory.
Mar.	26,	Tuesday	Easter Recess begins, 2:55 P.M.
Mar.	27,	Wednesday	Condition Examinations.
Apr.	3,	Wednesday	Class Exercises resumed, 8:50 A.M.
Apr.	15,	Monday	Quarterly Examinations, High School.
May	9,	Thursday	Ascension Day, Holiday.
May	15,	Wednesday	Feast of St. De La Salle, Holiday.
May	26-29,	Sunday-Wednesday	Annual Retreat for Graduating Classes.
May	30,	Thursday	Decoration Day, Services for Deceased Alumni.
June	8,	Saturday	Examinations.
June	14,	Friday	Commencement Exercises, High School.
June	16,	Sunday	Baccalaureate Sermon.
June	18,	Tuesday	Commencement Exercises, College. General Meeting of the Alumni Societies.

OFFICERS OF THE COLLEGE

BROTHER HENRY AUGUST

Chairman of Board of Trustees

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Registrar

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Secretary

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HISTORY AND ORGANIZATION.

THE institution now known as Manhattan College was opened in 1849 as an academy for young men who desired advanced instruction. From its original location in Canal Street, it was transferred in 1853 to its present site, where it was known as the Academy of the Holy Infancy. In 1863, it was incorporated by the Regents of the University of the State of New York under its present title, and empowered to confer the usual academic degrees.

The College offers two departments of study, the Department of Arts and the Department of Civil Engineering. The courses in the former lead to the degrees of Bachelor of Arts and Master of Arts, and include the studies prescribed for entrance to medical schools; in the latter, to the degrees of Bachelor of Science in Civil Engineering and Civil Engineer. The requirements for admission into both departments and the respective courses of study will be found on pages 10 and 25.

As the vernacular language and literature constitute an essential feature of a sound education, special attention is given in both departments to the study of English. The importance of the natural and experimental sciences is emphasized in the courses given in biology, physics, chemistry, and geology. These courses are of special benefit to students preparing for medical school. Of no less advantage for the prospective law student are the courses in logic and political and social science. For students who intend to embrace the teaching profession, there are offered courses in pedagogy and in the history and psychology of education.

Besides the College proper, there is a High School department. This department offers two courses—a modern language course and a business course. The former, which corresponds to the ordinary four-year high school course, prepares directly for college entrance; the latter, which offers two years of commercial work, may be elected after the completion of two years' work in a regular high school course.

In both the Collegiate and High School departments, every attention is bestowed on the moral and religious training of the student. Christian doctrine is taught in all the classes. Regular attention to religious duties is required of all students. Though the College is Catholic in its tone and teaching, non-Catholic students are received.

The Library contains 12,000 volumes, and additions are regularly made to keep the general reference section abreast of modern development. In the College Reading Room, the best current periodicals are kept on file.

The College Museums offer adequate facilities for research work in zoology, botany, geology and mineralogy.

EXPENSES.

Resident Students	$400 00
Day Students, College	110 00
Day Students, High School	80 00
Luncheon at College	60 00
Use of laboratory and apparatus for any one course	10 00
Use of surveying instruments	10 00
Use of typewriter	10 00
Use of library	2 00
Music: piano, $80; mandolin, $50; violin, $50	
Graduation	10 00
Certificate	5 00
Condition examinations, each subject	2 00
Athletics (collected by the College for the Athletic Association)	5 00

For books and stationery, cash payment is required.

Payment for the half session of five months is required **in advance.**

Remittances from outside New York City are to be made by draft or by post-office order payable at Station J.

REQUIREMENTS FOR ADMISSION.

The requirements for admission conform to the standards prescribed by the Regents of the University of the State of New York.

One unit represents one year's daily work in school.

1. **English.**—The requirements in English are based on the recommendations of the National Conference on Uniform Entrance Requirements in English.

Preparation in English has two main objects: (1) command of correct and clear English, spoken and written; (2) ability to read with accuracy, intelligence and appreciation.

ENGLISH GRAMMAR AND COMPOSITION

The first object requires instruction in grammar and composition. English grammar should ordinarily be reviewed in the secondary school; and correct spelling and grammatical accuracy should be rigorously exacted in connection with all written work during the four years. The principles of English composition governing punctuation, the use of words, sentences, and paragraphs, should be thoroughly mastered; and practice in composition, oral as well as written, should extend throughout the secondary school period. Written exercises may well comprise letter-writing, narration, description and easy exposition and argument. It is advisable that subjects for this work be taken from the student's personal experience, general knowledge, and studies other than English, as well as from his reading in literature. Finally, special instruction in language and composition should be accompanied by concerted efforts of teachers in all branches to cultivate in the student the habit of using good English in his recitations and various exercises, whether oral or written.

LITERATURE

The second object is sought by means of two lists of books, headed, respectively, *Reading* and *Study,* from which may be framed a progressive course in literature covering four years. In connection with both lists, the student should be trained in reading aloud and be encouraged to commit to memory some of the more notable passages both in verse and in prose. As an aid to literary appreciation, he is further advised to acquaint himself

with the most important facts in the lives of the authors whose works he reads and with their place in literary history.

A, READING

The aim of this course is to foster in the student the habit of intelligent reading and to develop a taste for good literature by giving him a first-hand knowledge of some of its best specimens. He should read the books carefully, but his attention should not be so fixed upon details that he fails to appreciate the main purpose and charm of what he reads.

With a view to larger freedom of choice, the books provided for reading are arranged in the following groups, from each of which at least two selections are to be made, except as otherwise provided under Group 1.

Books to Be Read: 1915-19

Group 1

CLASSICS IN TRANSLATION (two to be selected). The *Old Testament,* comprising at least the chief narrative episodes in Genesis, Exodus, Joshua, Judges, Samuel, Kings, and Daniel, together with the books of Ruth and Esther; the *Odyssey,* with the omission, if desired, of Books 1-5, 15-17; the *Iliad,* with the omission, if desired, of Books 11, 13-15, 17, 21; the *Æneid.* The *Odyssey, Iliad* and *Æneid* should be read in translations of recognized literary excellence.

For any selection from this group a selection from any other group may be substituted.

Group 2

SHAKESPEARE (two to be selected). *Midsummer Night's Dream, Merchant of Venice, As You Like It, Twelfth Night, The Tempest, Romeo and Juliet, King John, Richard II, Richard III, Henry V, Coriolanus, Julius Cæsar, Macbeth, Hamlet.* (The last three plays if not chosen for study under B.)

Group 3

PROSE FICTION (two to be selected). Malory's *Morte d'Arthur* (about 100 pages); Bunyan's *Pilgrim's Progress,* Part I; Swift's *Gulliver's Travels* (voyages to Lilliput and to Brobdingnag); Defoe's *Robinson Crusoe,* Part I; Goldsmith's *Vicar of Wakefield;* Frances Burney's *Evelina;* Scott's novels, any *one;*

Mrs. Gaskell's *Cranford;* Kingsley's *Westward Ho!* or *Hereward the Wake;* Reade's *The Cloister and the Hearth;* Blackmore's *Lorna Doone;* Hughes' *Tom Brown's School Days;* Stevenson's *Treasure Island,* or *Kidnapped,* or *Master of Ballantrae;* Cooper's novels, any *one;* Poe's *Tales;* Hawthorne's *House of the Seven Gables,* or *Twice Told Tales,* or *Mosses from an Old Manse;* a collection of short stories by various standard writers.

Group 4

ESSAYS, BIOGRAPHY, ETC. (two to be selected). Addison and Steele's *Sir Roger de Coverley Papers,* or selections from the *Tatler* and *Spectator* (about 200 pages); selections from Boswell's *Life of Johnson* (about 200 pages); Franklin's *Autobiography;* selections from Irving's *Sketch Book* (about 200 pages), or *Life of Goldsmith;* Southey's *Life of Nelson;* selections from Lamb's *Essays of Elia* (about 100 pages); selections from Lockhart's *Life of Scott* (about 200 pages); Thackeray's lectures on Swift, Addison and Steele, in the *English Humorists;* Macaulay, any one of the following essays—*Lord Clive, Warren Hastings, Milton, Addison, Goldsmith, Frederick the Great, Madam d'Arblay;* selections from Trevelyan's *Life of Macaulay* (about 200 pages); Ruskin's *Sesame and Lilies,* or selections (about 150 pages); Dana's *Two Years Before the Mast;* selections from Lincoln, including at least the two Inaugurals. the Speeches in Independence Hall and at Gettysburg, the Last Public Address, the Letter to Greeley, together with a brief memoir; Parkman's *Oregon Trail;* Thoreau's *Walden;* selected essays of Lowell (about 150 pages); Holmes' *Autocrat of the Breakfast Table;* Stevenson's *An Inland Voyage* and *Travels with a Donkey;* Huxley's *Autobiography* and selections from the *Lay Sermons,* including the addresses on Improving Natural Knowledge, A Liberal Education, and A Piece of Chalk; a collection of essays by Bacon, Lamb, DeQuincey, Hazlitt, Emerson, and later writers; a collection of letters by various standard writers.

Group 5

POETRY (two to be selected). Palgrave's *Golden Treasury* (*First Series*), Books 2 and 3, with special attention to Dryden, Collins, Gray, Cowper, and Burns; Palgrave's *Golden Treasury*

(*First Series*), Book 4, with special attention to Wordsworth, Keats, and Shelley (if not chosen for study under B); Goldsmith's *The Traveller* and *The Deserted Village;* Pope's *The Rape of the Lock;* a collection of English and Scottish ballads; Coleridge's *The Ancient Mariner, Christabel,* and *Kubla Khan;* Byron's *Childe Harold,* Canto 3 or 4, and *The Prisoner of Chillon;* Scott's *The Lady of the Lake,* or *Marmion;* Macaulay's *Lays of Ancient Rome, The Battle of Naseby, The Armada, Ivry;* Tennyson's *The Princess,* or *Gareth and Lynette, Lancelot and Elaine,* and *The Passing of Arthur;* Browning's *Cavalier Tunes, The Lost Leader, Good News from Ghent, Home Thoughts, Incident of the French Camp, Hervé Riel, Pheidippides, My Last Duchess, Up at a Villa, The Italian in England, The Patriot, The Pied Piper, "De Gustibus"—, Instans Tyrannus;* Arnold's *Sohrab and Rustum* and *The Forsaken Merman;* selections from American poetry, with special attention to Poe, Longfellow, Lowell, and Whittier.

B, STUDY

This part of the requirement is intended as a natural and logical continuation of the student's earlier reading, with greater stress laid upon form and style, the exact meaning of words and phrases, and the understanding of allusions.

Books to Be Studied: 1915-19

Group 1

DRAMA (one to be selected). Shakespeare's Julius Cæsar, or *Macbeth,* or *Hamlet.*

Group 2

POETRY (one to be selected). Milton's *L'Allegro, Il Penseroso,* and either *Comus* or *Lycidas;* Tennyson's *The Coming of Arthur, The Holy Grail,* and *The Passing of Arthur;* the selections from Wordsworth, Keats, and Shelley in Palgrave's *Golden Treasury.*

Group 3

ORATORY (one to be selected). Burke's *Speech on Conciliation with America;* Macaulay's *Speeches on Copyright,* and Lincoln's *Speech at Cooper Union;* Washington's *Farewell Address* and Webster's *First Bunker Hill Oration.*

Group 4

ESSAYS (one to be selected). Carlyle's *Essay on Burns,* with a selection of Burns' poems; Macaulay's *Life of Johnson;* Emerson's *Essay on Manners.*

EXAMINATIONS

The examination will be divided into two parts, one of which (English 1) will be on grammar and composition, and the other (English 2) on literature.

In grammar and composition, the candidate may be asked to construe sentences, to parse individual words, and to correct mistakes in usage. The main test in composition will consist of one or more essays, developing a theme through several paragraphs; the subjects will be drawn from the books listed above under *Reading,* from the candidate's other studies, and from his personal knowledge and experience quite apart from reading. For this purpose several subjects, perhaps eight or ten, will be indicated, from which the candidate may make his own selections.

The examination in literature will include: (1) General questions designed to test such a knowledge and appreciation of literature as may be gained by fulfilling the requirements defined under *Reading* above. The candidate will be required to submit a list of the books read in preparation for the examination, certified by the principal of the school in which he was prepared; but this list will not be made the basis of detailed questions. (2) More particular questions upon the content, form, and structure of the books prescribed for *Study,* and upon the meaning of such words, phrases, and allusions as may be necessary to an understanding of the works and an appreciation of their salient qualities of style. General questions may also be asked concerning the lives of the authors, their other works, and the periods of literary history to which they belong.

However accurate in subject-matter, no paper will be considered satisfactory if seriously defective in punctuation, spelling, or other essentials of good usage. (3 units.)

2. History.—(a) Ancient History, and events down to 814 A. D.; (b) English History, or Mediæval and Modern History; (c) American History and Civics. (2 units.)

3. Elementary Algebra.—Algebra through quadratics. The four fundamental operations, factoring, fractions, ratio, proportion, simple equations, radicals, quadratic equations, and problems involving quadratics. (1 unit.)

4. Intermediate Algebra.—Review of elementary algebra together with the following: The four fundamental operations for rational algebraic expressions, fractions, radicals, quadratic equations, simple cases of equations with two or more unknown quantities, binomial theorem with finding of 4th term, imaginaries, meaning of exponents, evolution, theory of quadratic equations, arithmetical and geometric progressions, graphic interpretation of equations. (½ unit.)

5. Plane Geometry.—The usual theorems and constructions of standard text-books. Original exercises and numerical problems. (1 unit.)

6. Solid Geometry.—The usual theorems and constructions of standard text-books. Original exercises and numerical problems. (½ unit.)

7. Plane Trigonometry.—The subject as given in standard modern text-books. (½ unit.)

8. French.—Grammar, sight translation, and composition based upon the following books:

Fraser and Squair, *Shorter French Course;* Bierman and Frank, *Conversational Reader;* Mairet, *La Tâche du Petit Pierre;* Daudet, *Neuf Contes Choisis;* Enault, *Le Chien du Capitaine;* Pattou, *Causeries en France;* Labiche, *La Grammaire;* Sarcey, *Le Siège de Paris;* Racine, *Esther;* Merimée, *Colomba.* (3 units.)

9. German.—Grammar, sight translation and composition based upon the following books:

Bagster-Collins, *First Year in German;* Hillern, *Höher als die Kirche;* Hauff, *Das Kalte Herz;* Wildenbruch, *Das Edle Blut;* Ebner-Eschenbach, *Krambambuli;* Storm, *Immensee;* Baumbach, *Der Schwiegersohn.* (2 units.)

10—Chemistry.—A course of at least sixty experiments made by the candidate, with note-book certified by the teacher. (1 unit.)

11. Physics.—Knowledge of the general principles of physics, and their applications. Each candidate must present a note-book containing a description of at least forty experiments which he has performed. (1 unit.)

The following will be accepted in place of French and German:

Latin.—Grammar, Allen & Greenough, or equivalent, including prosody. Cæsar, *Gallic War,* Books I-IV. Cicero, six orations. Reading at sight of a short passage of easy Latin prose. Virgil, *Æneid,* Books I-VI. Latin prose composition. (4 units.)

Greek.—Grammar, Goodwin, or equivalent, including prosody. Xenophon, *Anabasis,* Books I-III. Homer, *Iliad,* Books I-III. Greek prose composition. (3 units.)

Students presenting Latin and Greek for admission will be required to take a special course in French and German during the Freshman year, and will thereafter follow the regular program.

A certificate of the Regents of the University of the State of New York, or of approved schools, will be received in lieu of the entrance examination, provided it has been issued within the year. The candidate will, however, be examined on such branches as are not included in this certificate.

Candidates for admission must present a certificate of good character.

GENERAL REGULATIONS

Examinations.—Examinations for admission are held at the College on the two days preceding the opening of each term.

The regular College term examinations are held during the last week of January and the second week of June.

In case of illness, or for some other equally grave cause, a student may have his examination postponed.

Students absent for more than ten per cent. of the recitations in any subject will not be allowed to take the examination in that subject. Students absent on the two days following the Thanksgiving, Christmas, or Summer recesses, without permission, will be charged with two absences for each recitation missed.

For students who fail in the regular examinations, condition examinations are held at the College on the two days preceding the opening of the first term, and also on the first day of the Christmas and Easter recesses. Students are required to pay two dollars for an examination in each subject in which they are conditioned.

Rating.—The final standing of each student in any subject is determined by his examination results and his class-marks in that subject. Seventy per cent. constitutes a pass in each subject. A statement of the numerical standing of the student in each subject is sent to the parent or guardian at the close of each term.

Promotion.—No student will be allowed to take up Freshman work whose conditions on entrance exceed one and one-half units.* All entrance conditions must be removed before the beginning of Sophomore year.

No student will be allowed to take up Sophomore work whose failures in Freshman work exceed one and one-half units. No student will be allowed to take up Junior work whose failures exceed one unit in the work of the two previous years. No student will be allowed to take up Senior work who has any conditions.

Studies.—The studies of the course in civil engineering are prescribed throughout. In the Arts course, Freshman and Sophomore work is prescribed, and electives are offered in the Junior and Senior years. No elective course will be given unless there is a sufficient number of applicants.

Degrees.—Every candidate for a degree is required to present a typewritten thesis on a subject connected with his course. The subject selected must be submitted for approval to the Professor of the department to which it belongs, on or before February 1. Such help and guidance may be offered the candidate as the Professor may judge right, and the completed thesis shall be handed in for approval on or before May 30.

Theses in the Arts Department shall contain not less than two thousand words, and must be typewritten on paper 13x8, with a margin of an inch and one-half. Science theses must be accompanied by the necessary drawings and illustrations. All approved theses become the property of the College and are placed in charge of the Librarian.

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* A unit is five recitations a week for one year in any subject. Two hours of laboratory work or two hours of drawing are equivalent to one hour's recitation.

If a student fail to present his thesis, or if the thesis be rejected, he shall not be recommended for his degree.

At the discretion of the Faculty, a certificate of proficiency may be given to a student who has followed, under the direction of the Faculty, a special course of one or more subjects, and who gives evidence of satisfactory proficiency.

Honors.—Students who attain an average of ninety per cent. in all the subjects of their College course, will be graduated with *Honor*. They will be graduated with *Credit* if they attain an average of from eighty-five to ninety per cent. in all the subjects of their College course.

COURSE OF STUDY.

ARTS DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
English	(5)	52, 57	English	(5)	52, 57
Public Speaking	(1)	116	Public Speaking	(1)	116
French	(4)	63	French	(4)	63
German	(4)	69	German	(4)	69
History	(3)	74	History	(3)	75
Mathematics	(3)	90	Mathematics	(3)	89
Physics	(4)	114	Physics	(4)	115
Religion	(2)	121	Religion	(2)	121

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
English	(5)	53, 58	English	(5)	53, 59
Public Speaking	(1)	117	Public Speaking	(1)	117
French	(4)	64	French	(4)	64
German	(4)	70	German	(4)	70
History	(3)	76	History	(3)	77
Chemistry	(4)	13, 14	Chemistry	(4)	13, 14
Religion	(2)	122	Religion	(2)	122
ELECTIVES					
Biology	(4)	5	Biology	(4)	5

The figures in parentheses indicate the number of hours a week; the others indicate the paragraphs in which the course is outlined.

ARTS DEPARTMENT.

FRESHMAN CLASS.

PRE-MEDICAL.

FIRST TERM			SECOND TERM		
English	(5)	52, 57	English	(5)	52, 57
Public Speaking	(1)	116	Public Speaking	(1)	116
French	(4)	63	French	(4)	63
or			or		
German	(4)	69	German	(4)	69
Biology	(4)	3	Biology	(4)	4
Mathematics	(3)	90	Mathematics	(3)	89
Physics	(4)	114	Physics	(4)	115
Religion	(2)	121	Religion	(2)	121

SOPHOMORE CLASS.

PRE-MEDICAL.

FIRST TERM			SECOND TERM		
English	(5)	53, 58	English	(5)	53, 59
Public Speaking	(1)	117	Public Speaking	(1)	117
French	(4)	64	French	(4)	64
or			or		
German	(4)	70	German	(4)	70
Biology	(4)	5	Biology	(4)	5
Chemistry	(4)	13, 14	Chemistry	(4)	13, 14
Religion	(2)	122	Religion	(2)	122

JUNIOR CLASS.

FIRST TERM			SECOND TERM		
ENGLISH	(5)	54, 60	ENGLISH	(5)	55, 61
PUBLIC SPEAKING	(1)	118	PUBLIC SPEAKING	(1)	118
FRENCH	(3)	65	FRENCH	(3)	65
GERMAN	(3)	71	GERMAN	(3)	71
PHILOSOPHY	(4)	101, 102	PHILOSOPHY	(4)	106, 112
GEOLOGY	(4)	67	ASTRONOMY	(4)	1, 2
ECONOMICS	(2)	47	ECONOMICS	(2)	47
RELIGION	(2)	123	RELIGION	(2)	123

ELECTIVES.

FIRST TERM			SECOND TERM		
PEDAGOGY	(3)	97, 99	PEDAGOGY	(3)	97, 99
SPANISH	(3)	124	SPANISH	(3)	124
ITALIAN	(3)	87	ITALIAN	(3)	87
AMERICAN POLITICAL INSTITUTIONS	(1)	81	EUROPEAN CONSTITUTIONS	(1)	82
CHURCH HISTORY	(1)	86	CHURCH HISTORY	(1)	86

SENIOR CLASS.

FIRST TERM		
English	(4)	56, 62
Public Speaking	(1)	119
French	(2)	66
German	(2)	72
History of Philosophy	(2)	113
Philosophy	(4)	104, 105
Philosophy of History	(2)	85
Natural Theology	(2)	109

SECOND TERM		
English	(4)	56, 62
Public Speaking	(1)	119
French	(2)	66
German	(2)	72
History of Philosophy	(2)	113
Philosophy	(4)	103
Philosophy of History	(2)	85
Ethics	(2)	110, 111

ELECTIVES.

FIRST TERM		
Pedagogy	(3)	98
Biology	(4)	3
Spanish	(2)	125
Italian	(2)	88
Principles of Government	(3)	48
Public Finance	(2)	49
American History	(2)	83
History of the 19th Century	(1)	80

SECOND TERM		
Pedagogy	(3)	98
Biology	(4)	4
Spanish	(2)	125
Italian	(2)	88
Sociology	(3)	51
Representative Government	(2)	50
American History	(2)	84
History of the 19th Century	(1)	80

CIVIL ENGINEERING DEPARTMENT.

FRESHMAN CLASS.

FIRST TERM			SECOND TERM		
English	(2)	52	English	(2)	52
Public Speaking	(1)	116	Public Speaking	(1)	116
Mathematics	(6)	90, 91	Mathematics	(6)	89, 91
Physics	(2)	114	Physics	(2)	115
Physical Laboratory	(2)		Physical Laboratory	(2)	
Surveying	(5)	16	Surveying	(5)	17
Descriptive Geometry	(2)	42	Descriptive Geometry	(2)	42
Drawing	(4)	39, 40	Drawing	(4)	39, 40
Religion	(2)	121	Religion	(2)	121

Summer Field Work, Three Weeks, 36

SOPHOMORE CLASS.

FIRST TERM			SECOND TERM		
English	(2)	53	English	(2)	53
Public Speaking	(1)	117	Public Speaking	(1)	117
Mathematics	(3)	92	Mathematics	(3)	92
Mechanics	(3)	94	Mechanics	(3)	94
Railroad Engineering	(2)	18	Materials of Construction	(2)	22
Chemistry	(4)	13, 14	Chemistry	(4)	13, 14
Stereotomy	(3)	41	Surveying	(3)	38
Drawing	(3)	43	Graphic Statics	(2)	44
Surveying	(3)	38	Stereotomy	(2)	41
Religion	(2)	122	Drawing	(2)	43
			Religion	(2)	122

Summer Field Work, Three Weeks, 37

JUNIOR CLASS.

FIRST TERM		
Philosophy	(2)	100
English	(2)	54
Public Speaking	(1)	118
Masonry Construction	(2)	24
Mechanics of Materials	(3)	29
Highway Engineering	(2)	19
Design Problems	(5)	
Analytical Mechanics	(2)	95
Geology	(4)	67
Religion	(2)	123
Cement Laboratory	(4)	25

SECOND TERM		
Philosophy	(2)	100
Public Speaking	(1)	118
Masonry Construction	(2)	21, 24
Trusses	(3)	30
Tunneling (Not given in 1917-18)	(2)	26
Excavations (Not given in 1918-19)	(2)	27
Design Problems	(5)	45a
Metallurgy	(2)	15
Astronomy	(4)	1, 2
Hydraulics	(2)	33
Religion	(2)	123
Concrete, Plain and Reinforced	(2)	23a
Design Problems	(1)	23a,D

SENIOR CLASS.

FIRST TERM		
Public Speaking	(1)	119
Bridges	(4)	31
Sewers	(2)	28
Concrete, Plain and Reinforced	(2)	23b
Design Problems	(3)	23b,D
Design Problems	(6)	45b, 46
Economics	(2)	47
Natural Theology	(2)	109

SECOND TERM		
Public Speaking	(1)	119
Bridges	(4)	31
Contracts and Specifications	(1)	32
Railway Track and Track Work	(3)	20
Water Supply	(2)	34
Concrete, Plain and Reinforced	(2)	23b
Design Problems	(3)	23b,D
Design Problems	(4)	46
Economics	(2)	47
Ethics	(2)	110, 111
Thesis	(4)	

PEDAGOGY.

The regular College work in logic and psychology satisfies the requirements of both State and City Superintendents of Public Instruction, under whose immediate direction examinations in the history of education and in method are held. Upon completing a satisfactory examination in these subjects, the candidate receives a license to teach for three years, after which period, if successful experience can be demonstrated, the provisional license may be exchanged for a life certificate.

The main requisite is that the candidate be a graduate from a college or university recognized by the Regents of the University of the State of New York, wherein at least one year was spent in pedagogical study amounting to not less than 210 hours, with attendance upon lectures or recitations, as follows: logic or psychology, at least 90 hours; history and principles of education and methods of teaching, at least 120 hours.

The courses offered to the students in Pedagogy are:

Junior Year.—Logic, 60 hours.
Psychology, 90 hours.
History of Education and
Principles of Education, 90 hours.

Senior Year.—Method in teaching, 60 hours.
Observation, 20 hours.

HIGHER DEGREES.

Bachelors of Arts may obtain the Master's degree by pursuing an approved course of study and giving satisfactory evidence of scholarship. If such post-graduate study is not pursued in the College, the degree will not be conferred until two years after graduation.

Professional study, as such, does not entitled one to the Master's degree; but original research or special and scholarly study connected with a profession may, at the discretion of the Faculty, be accepted.

Essays, theses, and dissertations intended for the Master's degree must be presented at least one month before the end of the academic year, and must contain at least 3,000 words. The bibliography or list of works consulted must, in each case, be appended to the thesis.

If a candidate's thesis is approved, he will be informed as to the time when he will be required to meet the Board of Examiners for any further test of his qualifications which may be deemed necessary.

Bachelors of Science in Engineering may obtain the degree of Civil Engineer two years after graduation on the presentation of an approved thesis.

COURSES OF STUDY.

FOR THE MASTER'S DEGREE.

Master of Arts.

Any one of the following courses:

1. Moral Philosophy, with written thesis, making special application of its principles to mooted questions of the day.
2. Plato or Aristotle, with the history of his influence on modern thought.
3. A comparative study of the psychology of St. Thomas Aquinas and modern psychology.
4. A comparative study of Thomistic ethical principles and current theories.
5. A critical study of Locke's influence on modern philosophy.
6. A critical study of Kantianism.
7. A critical study, with practical applications, of any *one* of the following psychologic principles as applied in teaching:

   (*a*) Interest; (*b*) Apperception; (*c*) Attention; (*d*) Personal Equation; (*e*) Imitation; (*f*) Free Will; (*g*) Character; (*h*) Humor; (*i*) Imagination.
8. A critical examination of current errors in logic, psychology, or ethics.
9. A thoro criticism of any one of the accepted texts in logic, psychology, or ethics.
10. A critical examination of any one of the accepted texts in the history of education.
11. A critical study of the growth of the novel.

12. English Literature. Critical analysis of any classic author from the Catholic standpoint.
13. French literature, with translations at sight from any classic author, and a critical French essay on his work or his age.
14. German literature, with translations at sight from any classic author, and a critical German essay on his work or his age.
15. Church History. Selections of important periods for research, with essays embodying results of investigation.
16. A discussion of current theories in political economy.
17. A critical examination of any one of the texts commonly accepted as standard in political economy.
18. A detailed examination with applications of the relations of political economy to ethics.
19. A critical study of Leo XIII.'s encyclicals on political, social, and economic questions.
20. Discussion of prevalent sociological theories.
21. Amplification of topics discussed by the Catholic Truth Society.

Master of Science.

Any one of the following courses:

1. Higher co-ordinate geometry of two dimensions; co-ordinate geometry of three dimensions.
2. General theory of equations.
3. Higher parts of the integral calculus; differential equations; calculus of variations.
4. Rigid dynamics.

5. Fourier's theorem and its applications.
6. The wave theory treated mathematically or experimentally, or both.
7. The electromagnetic theory of light.
8. Phenomena of interference, diffraction and polarization.
9. Spectrum analysis.
10. The electronic theory of matter.
11. Conservation and dissipation of energy.
12. Application of the doctrine of energy to the phenomena of chemical combination.
13. Thermal measurement of energy.
14. Properties and phenomena of the ether.
15. Discharge of electricity through gases.
16. Recent views on electricity.
17. Higher parts of static and dynamic electricity.
18. Phenomena of alternating currents.
19. Astrophysics.
20. Special studies in civil engineering.
21. Special studies in electrical engineering.

These subjects are merely suggestive, and are intended to assist the candidate in the choice of a subject for his thesis. The treatment of the subject should be thoro and comprehensive, and should embody the result of original thought or of experimental investigation, as the case may require.

Published works of the candidate on the subject selected, articles in reviews of scientific periodicals, or contributions to the transactions of learned societies will receive due consideration from the Board of Examiners.

DEPARTMENTS OF INSTRUCTION.

ASTRONOMY.

1. **Descriptive Astronomy.**—The dimensions of the earth, its mass and motions. Phenomena depending on the axial and the orbital motion of the earth. Determination of the figure and magnitude of the earth. Kepler's laws and applications. Phenomena depending on change of place. Fundamental principles of celestial mechanics. Dimensions and configuration of the solar system. The sun and planets. Tides, eclipses, transits.

Young, *Manual of Astronomy.*

2. **Practical Astronomy.**—Construction, adjustment and use of the sextant, transit, spectroscope and equatorial telescope. Determination of the meridian, latitude, and local time.

BIOLOGY.

3. **Animal Biology.**—The study by lecture and laboratory of important types of the principal phyla of the animal kingdom. The amœba, euglena, paramœcium, grantia, hydra, starfish, earthworm, crayfish, honey-bee, spider, locust, frog, and fish are studied in detail. The comparative structure of the birds and mammals, and adaptation to environment, are observed and discussed. Biologic principles and theories are treated from the historical and critical viewpoints. Emphasis is laid upon the economic importance of the more prominent species.

Osborne, *Economic Zoology.*

4. **Plant Biology.**—The life histories of typical species of plant life are observed and discussed in the labo-

ratory and lectures. Principles governing the growth and development of the thallophytes, bryophytes, pteridophytes and spermatophytes are emphasized. As much of the morphology of these plants as is necessary for a proper understanding of life functions is reviewed. The algæ, fungi, moss, fern, pine, corn, and a flowering plant are studied in detail.

Hall and Bergen, *Principles of Botany.*

5. Human Anatomy and Physiology.—Lectures, illustrated with charts, models, and lantern slides. As an introduction to the study of the organs, the microscopic study of the fundamental tissues of the body is made. Blood is studied in the fresh and stained specimen. The fibrous and epithelial tissues are studied as to structure, type and location. To master the technique of histological work, slides are prepared directly by the student.

6. The Nervous System and Its Terminal Organs.—Lectures and illustrations, with charts, models, and lantern slides.

CHEMISTRY.

13. Qualitative Analysis.—Description of a method of separation which experience has proved to be sufficiently simple and accurate.

Noyes, *Qualitative Analysis.*

14. Laboratory Work.—Separation of the ordinary bases and acids.

Noyes, *Qualitative Analysis.*

15. Metallurgy of Iron and Steel.—Study of the physical and chemical properties as well as the constitution and manufacture of cast iron, wrought iron, and steel.

Stoughton, *The Metallurgy of Iron and Steel.*

CIVIL ENGINEERING.

16. Land Surveying.—Theory and general principles. Adjustment and use of instruments. Leveling; grading. Chain and compass surveying. Balancing, plotting, supplying omissions, and computing areas.

Tracy, *Plane Surveying.*

17. Land Surveying.—Topographical surveying by transit and stadia. Leveling, contour lines, plotting. Triangulation. Use of plane table, planimeter and sextant. Theory of simple curves, slope staking. City, hydrographic and mining surveying.

Breed and Hosmer, *Principles and Practice of Surveying.*

18. Railroad Engineering.—Reconnaissance, preliminary, and location surveys. Simple, compound, parabolic and spiral curves. Turnouts and crossings. Computation of earth work.

Allen, *Railroad Curves and Earthwork.*

Reference books: Kurtz, *Modern Location of Standard Turnouts;* Talbot, *The Railway Transition Spiral.*

19. Highway Engineering.—Preliminary investigations. Surveying and mapping. Design, drainage, and foundations. Earth, sand-clay, gravel, and broken-stone roads. Bituminous materials and various methods for using in roads. Penetration and mining methods. Wood block, stone block, brick, and concrete pavements. Street cleaning and snow removal. Car tracks, sidewalks, bridges.

Blanchard and Drownes, *Text-book on Highway Engineering.*

20. Railway Track and Trackwork.—Roadbed construction, Ballast, Ballasting, Ties, Tie plates, Rails, Rail renewals, Rail fastenings, Rail joints, Track-laying, Switches, Frogs, Turnouts, Crossings, Sidings, Yards, Terminals, Fences, Cattleguards, Handling and clearing snow, Bridge floors, Miscellaneous structures, Tools, Supplies, Signs, Signals, Interlocking systems, Electric railways, Organization of maintenance-of-way department, Trackwork of maintenance, Gages, Grades, Curves, Drainage, Ditching, Inspection of track, Premium system, Bridge inspection, Permanent improvements, Wrecking trains, Records, Reports, Accounts.

Tratman, *Railway Track and Trackwork.*

21. Foundations.—Bearing power of soils; foundations in rock; foundations in compressible soils; reinforcing the soil with piles. Sand, wood, steel, concrete piles; pile driving and determination of the bearing power of piles. Foundations in water; cofferdams, cylinders, pneumatic caissons.

Baker, *Masonry Construction.*

22. Materials of Construction.—Stones: quarrying, working, employment. Bricks: manufacture and employment. Production and testing of lime, hydraulic lime, and cement; mortar; concrete; timber; metals; miscellaneous materials.

23a. Concrete—Plain and Reinforced.—Proportions and strength of concrete, mixing and depositing, forms. Plain beams, flexure and design. Reinforced rectangular and "T" beams. Shear and diagonal tension. Slabs and columns.

Hool, *Reinforced Concrete Construction,* Vol. I.

23a, D. Design Problems.—To accompany course 23a.

23b. Concrete—Plain and Reinforced.—Theory, design, and construction. Gravity and cantilever retaining walls. Counterfort reservoir wall. Slab and buttress dam. Highway slab and girder bridges. Loft building construction. Miscellaneous structures.

Hool, *Reinforced Concrete Construction,* Vols. I. and II.

23b, D. Design Problems.—To accompany course 23b.

24. Masonry Structures.—Theory of the slope of earth embankments; graphical and analytical methods for determining earth-pressure as well as the thickness of retaining-walls and dams. Arches. Masonry bridges. Location of bridges, number of arches, their span and stability; location, dimension, and stability of abutments and piers, starlings, approaches, æsthetical arrangement of the different parts. Inclined and skew bridges.

Prelini, *Earth Slopes, Retaining Walls, and Dams.*

25. Cement.—History of natural and Portland cement. Raw materials, method of manufacture, uses. Standard methods of testing. Determination of specific gravity. Time of set. Fineness, soundness, tensile strength, mortars, storage of test pieces. Method of chemical analysis. Interpretation of results.

Mead, *Portland Cement.*

26. Tunneling.—Timbering and lining of tunnels. Excavation of tunnels through rock, and through loose and treacherous soils. Subaqueous tunnels. Open cut. Subways. Ventilation of tunnels.

Prelini, *Tunneling.*

27. Excavations.—Earthwork, excavations by hand and machine, rock excavation, hauling on horizontal and inclined roads, hoisting cableways, trench cutting, embankment constructions, dredging and dredging machines.

Prelini, *Earth and Rock Excavation.*

Prelini, *Dredges and Dredging.*

28. Sewers and Sewage Disposal.—Different sewerage systems. Amount of sewage. Run-off and storm water. Size and material of sewers. Manholes, catch basins, flushing tanks, etc. Sewage disposal by dilution. Mechanical and chemical clarification of sewage. Sewage treatment by septic tanks, contact beds, sprinkling filters, etc. Sewage disposal by irrigation.

Folwell, *Sewerage System.*

29. Mechanics of Materials.—Resistance and elasticity of materials, cantilever, simple and continuous beams, columns, torsion and shafts, stresses, resilience, tension and compression, flexure in beams, shear and torsion, true and apparent stresses, design and construction of beams in wood and steel, design of girders.

Merriman, *Mechanics of Materials.*

30. Theory of Trusses.—Truss elements, loads and reactions for trusses of various designs, influence lines and positions of loads for maximum bending movement. Wheel-loads and conventional systems of analysis, stress-strain diagrams, secondary stresses in trusses, applications to highway and railroad bridges.

Merriman and Jacoby, *Roofs and Bridges.* Part I. (begun).

31. Roofs, Bridges, and Buildings.—Different classes of bridges; riveted truss bridge, lattice bridge, pin-connected bridge. Design of details for roofs and bridges, floor systems, lateral and transverse bracing. The plate girder in detail. Complete designs, with estimate of cost for structure and erection. Lectures on the design of roof trusses, plate girders and truss bridges.

Merriman and Jacoby, *Roofs and Bridges.* Part I. (completed); Part III.

32. Contracts and Specifications.—The law of contracts. General specifications; special clauses in engineering specifications. The study and draughting of complete contracts and specifications.

Johnson, *Contracts and Specifications.*

33. Hydraulics.—Flow of water through orifices and over weirs, gauging of weirs. Flow of water in canals. Formulæ for discharge of water from locks. Motion of water in pipes. System of pipes. Gauging water in rivers. Rainfall and run-off. Pumps and pumping.

Merriman, *Hydraulics.*

34. Water Supply and Irrigation.—Analysis of water. Amount of water required. Sources of supply. Gravity systems. Intakes, reservoirs, aqueducts and distributing systems. Pumping. Sedimentation. Slow sand filtration. Mechanical filtration. Ozone, hypochlorite, and other methods of purification. Water softening. Details of construction and estimates of cost. Drainage areas, rainfall, evaporation. Reservoir construction. Dams for storage. Regulators. Velocity of flow and dimensions of canals. Distributing and lateral canals.

35. Inspection Visits.—Visits to engineering works and manufacturing establishments.

36. Field Work.—Compass and transit surveys. Farm survey. Leveling, profile, grading.

37. Field Work.—Triangulation. Topographical surveying with transit and stadia. Locating contours. Simple curves.

38. Field Work.—Reconnaissance and preliminary survey of railroad. Location of line. Profile and cross-section. Computation of earth work. About two miles of road are run, and the students make all calculations required in the regular routine of office work.

DRAWING.

39. Mechanical Drawing.—Use of instruments, geometrical problems, lettering, plans, elevations.

40. Mechanical Drawing.—Elementary projections, intersections, shades and shadows. Tinting drawings, pen-and-ink sketching.

41. Stereotomy.—Stone-cutting and its application to culverts, sewers, etc. Tracing and blue-prints.

42. Descriptive Geometry.—Demonstrations and execution of a series of plates.

Anthony and Ashley, *Descriptive Geometry.*

43. Drawing.—Plots of survey, topographical maps, contour maps, profiles.

44. Graphic Statics.—Resolution of concurrent and non-concurrent forces; determination of moments, of internal stresses, of centroids and moments of inertia. Application to roofs and trusses.

Merriman and Jacoby, *Graphic Statics.*

45a. Design Problems.—Graphic solution of problems concerning the slope of embankments, earth pressure against retaining-walls and dams; stability of retaining-walls, dams and arches. Design of a masonry bridge with plan, elevation, longitudinal and cross-sections.

45b. Design Problems.—Series of plates of graphical determinations of stresses in girders and trusses.

46. Bridge Design.—Design of roof trusses and fixed steel bridges. Drawbridges. Elevated steel structures. Skeleton of a steel building. Computations and working drawings are made from specifications for railroad bridges of assigned spans, and estimates of weight prepared.

See also Courses 23a, D and 23b, D.

ECONOMICS, SOCIAL AND POLITICAL SCIENCE.

47. Economics.—Principles of production, distribution, exchange, money, banking, international trade-relation of labor and capital, present organization of industry, currency legislation of the United States. Economic history of England and America.

Seager, *Economics, Briefer Course.*

48. Principles of Government.—Legislation, the judiciary, the executive, suffrage, and finance.

Wilson, *The State.*

49. Public Finance.—Sources of state income. Development, classification, incidents and effects of principal taxes.

Adam's *Science of Finance.*

50. Representative Government in the United States and other countries.

51. Sociology.—Psychology of social types. Historical aspects of social organization, both ancient and modern. Study of modern social problems.

ENGLISH.

52. English Composition.—The principles of composition; the structure of the paragraph and the sentence; the forms of prose composition. Versification. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *Composition: Oral and Written.*

53. English Composition.—Advanced work in the forms of prose composition and in the study of prose diction. Versification. Analysis of illustrative selections. Two short themes weekly; ten long themes. Assigned reading.

Baldwin, *A College Manual of Rhetoric.*

54. Advanced Argumentation.—The principles of argumentation; analysis of arguments; study of the rules and tests of evidence; theory and practice of brief-drawing. One argumentative essay of considerable length developed from formal brief.

Pattee, *Practical Argumentation.*

55. American Literature.—An intensive study of American literature from the Colonial period to the present time. Special stress on the poetry and prose of the nineteenth century, and on the Catholic writers of America. Assigned readings and reports.

Christian Brothers, *English Literature.*

56. Literary Criticism.—A study of the fundamental principles of literature and style; practice in construction; reports on assigned readings; application of the principles of literary criticism to English and American authors.

Winchester, *Principles of Literary Criticism.*

57. History of English Literature.—An outline course in the history of English and American literature, accompanied by a study of masterpieces illustrating the several literary periods.

Christian Brothers, *English Literature.*

For reading and study: *The Prologue to the Canterbury Tales, Richard III., Twelfth Night, Pilgrim's Progress, The Rape of the Lock,* Addison's Essays, *Childe Harold,* Canto IV., *The Idylls of the King, The Second Spring, Kenilworth, Fabiola, The Marble Faun,* selections from American poetry.

58. The Drama.—The development of the drama in England, with special emphasis upon the Elizabethan drama. The following plays are read and discussed: *Everyman, Edward II., A Midsummer Night's Dream, Richard II., Hamlet, The Tempest, The Alchemist,* and *The Rivals.*

59. English Literature of the Seventeenth and Eighteenth Centuries.—An outline history of the literary movements from the rise of Puritanism to the opening of the nineteenth century. Study of selected works of Milton, Pope, Addison, Goldsmith, and Burke. Considerable matter assigned for private reading. Lectures, recitations, and reports.

60. English Poetry of the Nineteenth Century.—Wordsworth and his contemporaries; Tennyson, Browning, and the Victorian era; American poetry. The literary history of the period is outlined by lecture. Considerable poetry is assigned for private reading.

Brother Azarias, *Books and Reading.*

Ward, *English Poets,* Vol. IV.

61. English Prose of the Nineteenth Century.—The essayists; the development of the novel in the nineteenth century. Lectures; discussions; themes; assigned readings.

Brother Azarias, *Books and Reading.*

For reading and study: Selected essays of Newman, Lamb, De Quincey, Carlyle, and Emerson. *David Copperfield, The Mill on the Floss, Diana of the Crossways, Callista, Lorna Doone.*

62. Philosophy of Literature.—Origin and function of literature; influencing agencies in literature; characteristics of ancient and modern literature. The literary artist.

Brother Azarias, *Philosophy of Literature.*

FRENCH.

63. Intermediate.—Review of grammar; practice in speaking and writing French.

Fraser and Squair, *French Grammar;* Newson, *French Daily Life;* Bazin, *Les Oberlé;* Dumas, *La Question d'Argent;* Hugo, *Ruy Blas;* Chateaubriand, *Extraits.*

64. Advanced.—Practice in speaking and writing French.

Mansion, *French Composition;* France, *Le Livre de mon Ami;* Lamartine, *Méditations;* Coppée, *Le Luthier de Crémone, Le Trésor;* Verne, *Michel Strogoff.*

65. Seventeenth Century.—Prose and classic drama. Bossuet, *Choix de Sermons et d'Oraisons;* Corneille, *Cinna, Le Cid;* Molière, *Le Misanthrope;* La Fontaine, *Fables;* Racine, *Andromaque.*

66. The History of French Literature.—The outlines of French literature. Lectures, assigned readings chiefly from authors of the eighteenth and nineteenth centuries.

Doumic, *Histoire de la Littérature Française.*

GEOLOGY.

67. General Geology.—Lectures and recitations The following topics are discussed: Origin of the earth, external and internal processes and the land produced by them; organisms as rock makers; a brief history of the earth, organic and inorganic.

Scott, *Introduction to Geology.*

GERMAN.

69. Intermediate.—Review of grammar; reading; oral and aural practice.

Thomas, *German Grammar;* Boezinge~~n~~, *Zweites Aufsatzbuch;* [er] Gore, *German Science Reader;* Schiller, *Wilhelm Tell;* Goethe, *Hermann and Dorothea.*

70. Advanced.—Oral and aural practice reading; prose composition; syntax.

Pope, *Writing and Speaking German;* Freytag, *Karl der Grosse;* Suderman, *Teja;* Heine, selections; Lessing, *Minna von Barnhelm;* Schiller, *Die Jungfrau von Orleans.*

71. The German Drama.—The classic drama; the romantic school; modern German drama. Essays in German. Oral and aural practice.

Pope, *Writing and Speaking German.*

The following plays will be studied in class: Lessing, *Nathan der Weise;* Goethe, *Iphigenie;* Schiller, *Maria Stuart;* Grillparzer, *Der Traum ein Leben;* Fulda, *Unter vier Augen.*

72. The History of German Literature.—Outlines of the history of German literature. Lectures and discussions. Essays in German. Reading assigned by the instructor.

Stroebe and Whitney, *Geschichte ~~aus~~ der deutschen* [von] *Literatur;* Wenckelbach, *Die Meisterwerke des Mittelalters.*

HISTORY.

74. Ancient History.—History of Greece, with special reference to its literature, politics and commerce.

75. Ancient History.—Rome, from the founding of the City to the fall of the Western Roman Empire, with special reference to literature, politics and commerce.

76. Medieval History.—From the fall of the Western to the fall of the Eastern Roman Empire. The Holy Roman Empire and the Papacy receive special attention.

77. Modern History.—The principal subjects studied are the revival of learning, the age of discovery, the Reformation, in England, France and Germany, the Thirty Years' War, the age of Louis XIV., the French Revolution, the nineteenth century.

80. The History of the Nineteenth Century.—This course treats principally of the restoration of the Bourbons, the Revolutions of 1830 and 1848, the Austro-Prussian war, the Franco-Prussian war, the unification of Germany and Italy.

81. American Political Institutions.—Nature of state and national systems; organization and powers of legislative, executive, and judicial departments of Federal Government.

82. European Constitutions.—Political institutions of England and Switzerland as compared with those of the United States.

83. Constitutional History of the United States.—Colonial governments, the confederation, the federal constitution, national vs. state sovereignty.

84. Constitutional History of the United States.—War of 1812, federal judiciary, nullification act, state constitutions, the Civil War.

85. The Philosophy of History, based principally on the works of Balmes, Schlegel and Allies.

86. Church History.—From the founding of the Church to the Protestant Reformation, based on the works of Allies, Montalembert, Mann, Janssen, and Pastor. Illustrated lectures including the history and geography of the Holy Land.

ITALIAN.

87. Elementary Course.—Grammar, composition, reading.

Marinoni, *Italian Grammar and Italian Reader;* De Amicis, *Cuore;* Manzoni, *I Promessi Sposi.*

88. Dante.—

The *Vita Nuova;* the *Divina Commedia.*

MATHEMATICS.

89. Algebra.—Advanced algebra.

Hawkes, *Advanced Algebra.*

90. Trigonometry.—Plane and spherical.

Wentworth, *Plane and Spherical Trigonometry.*

91. Analytical Geometry.—General equation of the second degree; straight line, plane, surfaces of revolution.

Nichols, *Analytical Geometry.*

92. Calculus.—Differential and integral, with application to geometry, mechanics, engineering, and physics.

Osborne, *Differential and Integral Calculus.*

MECHANICS.

94. Mechanics.—Principles of statics and dynamics.

Maurer, *Technical Mechanics,* Part I.

95. Analytical Mechanics.—Statics of concurrent and parallel forces, theory of couples, friction, mass-moments. Theorems of Guldinus. Work and energy. Impulsive forces. Angular velocity and acceleration. Simple harmonic motion. Centroids of surfaces and solids. Moments of inertia, with application to engineering problems. The conical and the ordinary pendulum. Pressure due to gravitating liquids, center of pressure, equilibrium of floating bodies.

Bowser, *Analytical Mechanics.*

Bowser, *Hydromechanics.*

PEDAGOGY.

97. Principles of Education.—The educative process. The physical, mental, and moral laws upon which education is based. Aims and ideals of Catholic education. The teacher and his qualification. School organization, hygiene and discipline. Aids to teaching.

Thorndike, *The Principles of Teaching;* Ruediger, *Principles of Education;* Shields, *The Psychology of Education;* Bagley and Colvin, *Human Behavior;* Horne, *Psychological Principles of Education.*

98. Methods in Teaching.—Meaning of instruction and its relation to education. The psychologic and logical views of knowledge. The psychologic basis of method. Its general principles. The function of the recitation. The conduct of the recitation.

Collar and Crook, *School Management and Methods of Instruction;* Brothers of the Christian Schools, *Elements of Practical Pedagogy;* Strayer, *Brief Course in the Teaching Process;* Freeman, *The Psychology of the Common Branches.*

99. History of Education.—Study of the educational thought and practice of the ancient nations. Early Christian education; medieval education; scholasticism; the universities. Influence of the Renaissance and the Reformation on educational ideas. The religious orders. Realism; naturalism; the psychologists; the sociological movement. Rise of modern school systems. Problems of present-day education.

McCormick, *History of Education;* Graves, *A History of Education;* Monroe, *Text-book in the History of Education.*

PHILOSOPHY.

100. Introduction to Philosophy.—A general view of the field of philosophy; its principal problems. The more important philosophical systems.

Dubray, *Introductory Philosophy.*

101. Formal Logic.—The idea. Errors as to the nature of ideas in modern English and German philosophy. Definition. Division. The nature of judgment. The value of the syllogism.

Turner, *Lessons in Logic;* Brothers of the Christian Schools, *Elementary Course in Philosophy.*

102. Method.—General principles. Special methods. Deduction and induction. Methods of observation. Methods of explanation.

Jevons, *Lessons in Logic;* Brothers of the Christian Schools, *Elementary Course in Philosophy.*

103. Epistemology.—The possibility of certainty. Scepticism. Veracity of the senses and the intellect. Idealism vs. Realism. Universals. Authority and belief. Critical examinations of various theories of knowledge.

Poland, *The Truth of Thought.* Rickaby, *First Principles of Knowledge.*

104. Metaphysics.—The Aristotelian transcendentals. Reality of substances. Causation. Errors concerning causation. Final causes.

Brothers of the Christian Schools, *Christian Philosophy.*

105. Cosmic Philosophy.—Nature, origin, and duration of the universe. Ultimate constituents of bodies. Theory of matter and form. Laws of nature. Possibility of miracles. The concepts of natural science and scholastic philosophy.

Brothers of the Christian Schools, *Christian Philosophy.*

106. Psychology.—Rational vs. experimental psychology; value of each. Faculty, habit and action. The life principle. Vegetative Life. Theory of sensation. Qualities of sensation. Intellection. Attention. Apperception. Association of Ideas. Evolutionism. Heredity. Freedom of will. Spirituality and immortality of the soul.

Maher, *Psychology.*

107. The Psychology of Education.—A study of mental development. The psychological basis of education and of methods of teaching. Refutation of prevalent errors in educational psychology.

109. Natural Theology.—Proof of God's existence and providence—Deism, pantheism, agnosticism, atheism. Existence of evil. Preservation of creatures. Divine concurrence.

Brothers of the Christian Schools, *Cours de Philosophie.*

110. General Ethics.—Nature of a human act. Ultimate end of human actions. Determinants of morality. Does the end justify the means? Hindrances to the perfection of a human act. The passions, habit, virtue, vice.

Brothers of the Christian Schools, *Cours de Philosophie.*

111. Special Ethics.—Man's rights and duties as an individual. Man's duties to God—Adoration, love, obedience. Man's duties to his neighbor as regards soul and body. Man's duties to himself as to soul and body. Suicide and duelling.

Man's rights and duties as citizen. The state. Its constituent elements. Its origin, end, scope, and limits.

Common law of nations. Peaceful relations among nations.

Ecclesiastical society. The Church—Its origin and constitution. Its ends and limits. Its superiority to the state. Its mission to the modern world.

Brothers of the Christian Schools, *Cours de Philosophie.*

112. Experimental Psychology.—Elements and general methods. Elements of mental life; sensation, feeling, conation. Experiments on the outer senses and on the association of ideas, with special application to pedagogy.

Seashore, *Elementary Experiments in Psychology.*

113. History of Philosophy.—Principles of the great founders of Ancient Schools; their vitality as illustrated in modern views. History of medieval philosophy. History of modern philosophy. The Neo-Scholastic movement.

Turner, *History of Philosophy.*

PHYSICS.

114. Mechanics.—Matter and energy. Kinematics; rectilinear, curvilinear, and periodic motion. Dynamics; laws of motion, work and energy, rotation, equilibrium, elasticity, machines. Mechanics of fluids; molecular phenomena in fluids, density and specific gravity, fluids in motion, properties of gases.

Light.—Laws of propagation, velocity and intensity of light. Photometry. Reflection and refraction; formation of images by mirrors and lenses. Spectrum analysis and study of optical instruments.

Heat.—Temperature and its measurement. Expansion of solids, liquids and gases. Change of state. Conduction, convection, radiation and absorption of heat. Vapor tension. Latent heat and specific heat. Relation between heat and work; energy, actual and potential.

Sound.—Production and propagation, velocity, reflection and refraction. Simple cases of resonance and interference. Intensity, pitch and quality. Transverse vibrations of strings. Longitudinal vibration of columns of air and of rods; vibrations of plates and membranes.

Determination of pitch and wave-length. Doppler's principle and applications.

Electricity and Magnetism.—Fundamental phenomena of static electricity; general laws of distribution and induction. The Leyden jar and other condensers. Influence machines. Atmospheric electricity. Use of quadrant electrometer. Primary and secondary batteries; electromotive force, strength of current, division of current in a network of conductors. Ohm's law and applications. Magnetic, thermal and chemical effects of the current. Laws of electrolysis. Measurement of current and resistance. The electromagnet. Current induction, induction by magnets, the induction coil, discharge in low and high vacua. Continuous-current dynamo and motor; the alternator. The electric transmission of energy. Electric lighting. Thermo-electric currents. Telegraphy and telephony. Wireless telegraphy.

Permanent magnets and molecular theory; magnetic induction; the magnetic circuit. Comparison of magnetic fields. Theory and use of the magnetometer and dip-circle. Terrestrial magnetism and determination of the magnetic elements; magnetic charts.

Carhart, *College Physics*.

Physical Laboratory.—Study of the magnetic field due to a magnet and combination of magnets. Curve of free magnetism. Law of the inverse square. Comparison of magnetic moments. The ratio $\frac{M}{H}$ also the product $M \times H$. Determination of magnetic dip. Laying out the meridian; magnetic declination. Measurement of electromotive force, resistance of conductors, and capacity of condensers. Battery resistance and current strength. Measurements relating to storage batteries. Use of the tangent galvanometer, ammeter and voltmeter for direct and alternating currents; the wattmeter and electrodynamometer; the copper voltmeter. Quantitative estimate of heat development in a circuit.

PUBLIC SPEAKING.

116. Oral Interpretation.—A study of the elements of vocal expression. Correctness and distinctness of utterance. The study and delivery of selections and short original speeches.

Winans, *Public Speaking.*

117. Oral Interpretation.—A study of the principles of attention, emotion, gesture. Delivery of selections and original speeches.

Winans, *Public Speaking.*

118. Argumentative Oratory.—Principles of persuasion and belief. Methods of delivery. Delivery of selections and original orations.

Winans, *Public Speaking.*

119. Public Address.—Delivery of original compositions.

RELIGION.

121. Dogma.—Explanation of the principal dogmas, with special insistence on the continuity of the Church. The Church and science. Objections. History of the Old Testament.

Christian Brothers' *Manual of Christian Doctrine,* Part I.

122. Moral.—Explanation of the fundamental principles of Christian morality as contained in the decalogue. History of the New Testament.

Christian Brothers' *Manual of Christian Doctrine,* Part II.

123. Worship.—Grace, prayer, and the sacraments, with special references to the Council of Trent and the tenets of Protestantism. History of the Church.

Christian Brothers' *Manual of Christian Doctrine,* Part III.

SPANISH.

124. Elementary.—Grammar, reading, composition. De Vitis, *Spanish Grammar;* Worman, *New First Spanish Book;* Hills, *Spanish Tales for Beginners;* Valera, *El Pájaro Verde;* Waxman, *A Trip to South America.*

125. Intermediate.—Reading, conversation, composition.

Alarcon, *Novelas Cortas;* Nelson, *The Spanish American Reader;* Cervantes, *Don Quixote;* Remy, *Spanish Composition.*

126. Advanced.—Composition, conversation. Calderon, *El Principe Constante; La Vida es Sueno;* Lope de Vega, *La Estrella de Sevilla.*

MANHATTAN COLLEGE HIGH SCHOOL.

The aim of the High School is to prepare for admission to college. The studies conform to the *Syllabus for Secondary Schools* of the New York State Education Department.

The requirements for admission are the preliminary studies prescribed by the Education Department. The most favorable time for entrance is at the beginning of the scolastic year. The regular examinations for admission take place on the two days immediately preceding each term.

The classes are frequently examined, and students are not allowed to pass from one subject to another until they have given evidence of adequate knowledge of the subject. A student who shows by the results of the examinations that he is unable to keep up with his class will be placed in a lower grade.

The Inspector examines weekly the record of every pupil, and comments upon it before the professors and students of the class.

Summarized reports of the examinations are forwarded to the parents at the end of each quarter.

Since each report shows the exact standing of the student, it should be carefully examined by his parent or guardian.

Percentages are rated as follows: From 90 to 100, excellent; from 80 to 90, very good; from 70 to 80, good; under 60, unsatisfactory.

Promotions are based on the joint results of the quarterly examinations and the daily marks. No student will be promoted unless he attains an average of at least 60 per cent. in each subject, and a general average of 70 per cent.

Students who fail to get the average required in any subject may present themselves for examination on the two days immediately preceding the reopening in September. A fee of one dollar is required for each subject examined.

At least three hours a day should be given to the preparation of class work.

The active co-operation of parents with the faculty is essential to the progress of the student. Parents are therefore requested to insist upon regular attendance and careful preparation of class work.

Punctuality at all sessions and recitations is required.

In all cases of absence a written excuse from parents or guardian is required. This excuse will not be accepted in lieu of omitted class work.

Wednesday and Saturday afternoons are the regular weekly half-holidays.

Students who live in the College may not leave the grounds without authorization.

COMMERCIAL DEPARTMENT.

Students who desire to prepare for mercantile life will find every facility in the Commercial Department. This department comprises two years' work, and no student is admitted until he has satisfactorily completed the studies of the *second year* of high school.

The students receive a thoro course in standard business methods and in the science of accounts. A complete course in commercial arithmetic is given, and ample opportunity is afforded for the practice of shorthand and typewriting.

The Commercial course does not, however, confine its work to purely business branches. Subjects of general culture are also included. English composition and letter-writing receive special attention. The student is required to treat prescribed subjects in a manner that will enable him to write with ease and elegance. Questions relating to political economy and commercial law are discussed in the class-room in order to give the student correct ideas on the vital questions of daily life. Weekly lessons are given in the art of public speaking, in order that the student may acquire an easy and graceful delivery.

Students who complete the Commercial course receive a certificate as a guarantee of their fitness for mercantile employment.

COURSE OF STUDY—HIGH SCHOOL.

FIRST YEAR.

ENGLISH. (4)—Hanson, *Two Years' Course in English Composition.*
Stevenson, *Treasure Island;* Coleridge, *The Ancient Mariner;* Parkman, *Oregon Trail.*

PUBLIC SPEAKING (1)—Houghton, *Public Speaking.*

ALGEBRA. (5)—Through Quadratics.
Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Bierman and Frank, *Conversational Reader.*

BIOLOGY. (5)—Peabody and Hunt, *Elementary Biology.*

DRAWING. (2)—*Syllabus for Secondary Schools,* pp. 380-384.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Dogma.*

SECOND YEAR.

ENGLISH. (3)—Hanson, *Two Years' Course in English Composition;* Irving, *Sketch Book;* Shakespeare, *Merchant of Venice,* Hawthorne, *Twice-Told Tales;* Goldsmith, *The Deserted Village.*

PUBLIC SPEAKING (1)—Houghton, *Public Speaking.*

PLANE GEOMETRY. (5)—Wentworth, *Plane Geometry.*

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* Figures in parentheses indicate the number of recitations a week.

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Bierman and Frank, *Conversational Reader;* Labiche et Martin, *La Poudre aux Yeux;* Mairet, *La Tâche du Petit Pierre.*

GERMAN. (5)—Bagster-Collins, *First Book in German;* Bacon, *Vorwärts.*

ANCIENT HISTORY. (3) Wolfson, *Essentials in Ancient History.*

DRAWING. (2)—*Syllabus for Secondary Schools,* pp. 384-385.

RELIGION. (2)—Christian Brothers' Series, No. 4. *Moral.*

THIRD YEAR.

ENGLISH. (3)—Gardiner, Kittredge, and Arnold, *Manual of Composition and Rhetoric; The Sir Roger de Coverley Papers;* Shakespeare, *Henry V;* Dickens, *A Tale of Two Cities;* Tennyson, *Gareth and Lynette, Launcelot and Elaine* and *The Passing of Arthur.*

PUBLIC SPEAKING (1)—Houghton, *Public Speaking.*

SOLID GEOMETRY (First Term). (4)—Wentworth, *Solid Geometry.*

INTERMEDIATE ALGEBRA (Second Term). (4)—Wentworth, *Elementary Algebra.*

FRENCH. (5)—Fraser and Squair, *Shorter French Course;* Enault, *Le Chien du Capitaine;* Labiche, *La Grammaire;* Sarcey, *Le Siége de Paris;* Racine, *Esther;* Pattou, *Causeries en France.*

German. (5)—Bagster-Collins, *First Book in German;* Boezinger, *Erstes Aufsalzbuch;* Wildenbruch, *Das Edle Blut;* Ebner-Eschenbach, *Krambambuli.* Oral and aural practice. [t]

Physics. (5)—Carhart and Chute, *First Principles of Physics;* Chester, Dean, Timmerman, *Laboratory Manual of Physics.*

Drawing. (1)—*Syllabus for Secondary Schools,* pp. 385-386.

Religion. (2)—Christian Brothers' Series. No. 4. *Worship.*

FOURTH YEAR.

English. (3)—Gardiner, Kittredge, and Arnold. *Manual of Composition and Rhetoric;* Burke, *Speech on Conciliation with America;* Milton, *L'Allegro, Il Penseroso, Comus;* Macaulay, *Life of Johnson;* Shakespeare, *Macbeth;* Newman, *The Dream of Gerontin.*

Public Speaking (1)—Houghton, *Public Speaking.*

Trigonometry. (2)—Wentworth-Smith, *Plane and Spherical Trigonometry.*

German. (4)—Storm, *Immensee;* Elster, *Zwischen den Schlachten;* Baumbach, *Der Schwiegersohn.*

American History and Civics. (5)—Hart, *Essentials in American History;* Boynton, *School Civics.*

CHEMISTRY. (5)—McPherson and Henderson, *First Course in Chemistry;* McPherson and Henderson, *Laboratory Exercises.*

DRAWING. (1)—*Syllabus for Secondary Schools,* p. 386.

RELIGION. (2)—Christian Brothers' Series, No. 4. Complete.

COMMERCIAL COURSE.

For First and Second Years see pages 57 *and* 58.

THIRD YEAR.

ENGLISH. (3)—See English, p. 58.

PUBLIC SPEAKING (1)—Houghton, *Public Speaking.*

CIVICS. (2)—See Civics, p. 59 (above).

COMMERCIAL LAW. (3)—Richardson, *Commercial Law.*

FRENCH. (5)—See French, p. 58.

or

GERMAN. (5)—See German, p. 59.

or

SPANISH. (5)—See Spanish, No. 124.

SHORTHAND. (5)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

TYPEWRITING. (2)—Smith, *A Practical Course in Touch Typewriting.*

COMMERCIAL ARITHMETIC. (4)—Moore and Miner, *Practical Business Arithmetic.*

RELIGION. (2)—See Religion, p. 59.

FOURTH YEAR.

ENGLISH. (3)—See English, p. 59.

PUBLIC SPEAKING (1)—Houghton, *Public Speaking.*

POLITICAL ECONOMY. (3)—Laughlin, *Elements of Political Economy.*

GERMAN. (5)—See German, p. 59.

or

SPANISH. (5)—See Spanish, No. 125.

SHORTHAND AND TYPEWRITING. (6)—I. Pitman, *Course in Shorthand;* Hammond, *Pitman's Progressive Dictator.*

BOOKKEEPING. (5)—Montgomery, *Bookkeeping and Business Practice.*

RELIGION. (2)—See Religion, p. 60.

PRIZES AND MEDALS.

COLLEGE.

1. A purse of $50 is awarded by the Alumni Society to the best English essayist of the graduating class. The prize contest consists of two essays, one prepared and the other extemporaneous. The subject of the first is announced at the beginning of the month of October, and the essay must be presented not later than the second Tuesday of April. The subject of the second is announced when the candidates are assembled to write the essay.

2. The Milmo-McGowan Medal for religious instruction was founded by Mrs. B. McGowan, in memory of her son, Mr. Michael J. McGowan, '69. This medal is awarded on competitive examination on the subject matter of the four years' course in Christian doctrine and church history. The examination takes place at the end of May.

3. The Kelly Medal for philosophy, offered to the students of the Senior Class, was founded by the late Mr. Eugene Kelly, of New York City. This medal is awarded for proficiency in logic, metaphysics, and psychology.

4. The Grady Memorial Medal for oratory was founded by the Alumni Society in memory of Rev. John M. Grady, '69. The contest for this medal is open to all College students.

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* In all cases in which "record" determines the award, failure in a regular examination eliminates the candidate.

5. The Brennan Medal for the Philosophy of History is awarded to the student of the Senior Class who obtains the highest average in this subject. The donor of this medal is The Hon. John F. Brennan, LL.D., '75.

6. The Medal for Pedagogy is awarded to the student who obtains the highest average in this subject during Junior and Senior years.

7. The Cohalan Medal for civil engineering, the gift of Hon. Daniel F. Cohalan, LL.D., '85, in memory of his father, is awarded to the Senior student who has the highest record for the year in the civil engineering course.

8. The Develin Medal for French, founded by Mr. Charles E. Miller, of New York City, in honor of his friend, Mr. John E. Develin, is awarded by competitive examination on the matter of the four years' College course.

9. The Radford Medal for Natural Science is offered by the Alpha Beta Sigma to the student who has the highest average in Natural Science during his College course.

10. The Doelger Medal for German, the gift of Mrs. Doelger, in memory of the late Peter Doelger, is awarded to the student who has the highest record for the four years' College course in German.

HIGH SCHOOL.

1. The Medal for Elocution is awarded by competition among the students of the High School Department.

2. The Medal for Excellence is awarded to the pupil who has the highest general average for the fourth year of the High School course.

3. The Brother Charles Memorial Medal, donated by the Commercial Alumni Society, is awarded to the student of the Commercial Department who has the highest record for proficiency throughout the course.

4. The Kean Medal for Christian doctrine, founded by the late Rt. Rev. Mgr. John J. Kean, LL.D., '66, is open to all students of the Commercial Department.

5. The Pommerer Medal, donated by William C. Pommerer, M. A., '91, is awarded to the student of the graduating class who passes the best examination in shorthand and typewriting.

COLLEGE SOCIETIES.

THE APOSTLESHIP OF PRAYER and LEAGUE OF THE SACRED HEART.

The Apostleship of Prayer and League of the Sacred Heart is established in the College and High School departments to foster among the students the spirit of piety, to enable them to acquire more thoroly the spirit of Christianity, and to kindle in them zeal for works of reparation towards our Divine Lord.

The Communion of Reparation is made every first Friday, and the morning offering and daily "decade" form a part of the regular class exercises. Devotions in honor of the Sacred Heart are held in the College chapel on the first Friday of each month.

THE ARCHCONFRATERNITY OF THE HOLY CHILD JESUS.

This Archconfraternity has been erected in the chapel of the Brothers of the Christian Schools at Bethlehem. To it belong pupils of the Brothers' schools thruout the world. Its end is to obtain from Heaven thru the Divine Child Jesus: 1st, That God may have the first place in all the studies in educational establishments; 2nd, that teacher and pupils may be everywhere free to observe the laws of Holy Church without any restraint whatever; 3rd, that Catholic children may not be exposed to lose their faith in schools where God is not recognized. The Archconfraternity publishes a quarterly review entitled, *Little Messenger of the Divine Infant.*

MANHATTAN COLLEGE ALUMNI SOCIETY.

The object of the Society is to keep alive among the Alumni a sentiment of affection for their Alma Mater, and to unite the graduates of successive years by a common tie of fellowship.

There are three reunions of the Society each year; at the Alumni dinner, at the Memorial Mass on Decoration day, and at the reception of the newly graduated class on Commencement day.

Officers.

President	Hon. Peter A. Sheil, '96
First Vice-President	John E. Kiffin, '99
Second Vice-President	John J. Curtin, '00
Third Vice-President	Joseph A. Dillon, M. D., '87
Secretary	John Francis Brosnan, '11
Treasurer	Rev. John T. Jordan, '98
Historian	*Brother Chrysostom, '81

COMMERCIAL ALUMNI SOCIETY.

The Manhattan Commercial Alumni Association was organized September 5, 1901. Two meetings are held yearly.

Officers.

President	Daniel C. Beckingham, '02
First Vice-President	James F. Kelly, '05
Second Vice-President	Christopher M. Leonard, '10
Secretary	Amos P. Silkworth, '13
Treasurer	James A. Smyth, '08
Historian	Bernard J. Kearney, '08

* Deceased.

DE LA SALLE LITERARY SOCIETY.

This Society is confined to the students of the Senior year. The end proposed is the free discussion of questions pertaining to philosophy, which have been suggested, but not fully treated in the class-room. The Professor of Philosophy acts as Moderator.

Officers.

President	Charles C. Power
Vice-President	James A. Houlihan
Secretary	Sylvester Del Bello
Treasurer	James T. Brennan
Historian	Bernard J. McEntegart

NEWMAN LITERARY SOCIETY.

The members of the Junior Class form this Society. The exercises, consisting of original essays and debates on literary or other subjects, are held weekly. The Professor of English Literature acts as Moderator.

Officers.

President	David J. Martin
Vice-President	Louis J. Retaleato
Secretary	Denis C. Quinn
Treasurer	Arthur C. Mayer
Critic	Thomas C. Bowe

HUGHES LITERARY SOCIETY.

This Society consists of the students of the Sophomore year. Meetings are held twice a month, the principal exercises of which are debates on historical and scientific subjects, and on questions of the day, as well as essays on various topics. The senior Professor of the class is Moderator of the Society.

Officers.

President	Leo C. Fennelly
Vice-President	Joseph F. Holland
Secretary	Edward J. Joyce
Treasurer	Farrell D. Coyle
Critic	James V. O'Reilly

McCLOSKEY LITERARY SOCIETY.

This Society, composed of the members of the Freshman Class, holds its regular meeting every week. The exercises consist principally of debates on various subjects and essays on literary and historical topics. The Professor of English literature is Moderator of the Society.

Officers.

President	Joseph O. Saurette
Vice-President	Raymond J. Ryan
Secretary	John J. Burns
Treasurer	Lawrence F. Keane
Historian	Bernard R. McConville

HAYES LITERARY SOCIETY.

The students of the Fourth Year High School have formed a literary society, which they have named after the Rt. Rev. Patrick J. Hayes, '88, Auxiliary-Bishop of New York. They hold regular weekly meetings, and sometimes class exercises, to which the College students are invited. The senior Professor of the class acts as Moderator.

Officers.

President	Robert T. Martin
Vice-President	William F. Burke
Secretary	Thomas C. Brady
Treasurer	John J. Kelly
Critic	Charles L. Corbalis

FARLEY LITERARY SOCIETY.

This Society is composed of the Senior students of the Commercial Department. Literary exercises and discussions of questions pertaining to business and commerce constitute the program for the weekly meetings. The Principal of the Department acts as Moderator.

Officers.

President	William J. O'Brien
Vice-President	Francis R. Hopkins
Secretary	John M. Kennedy
Treasurer	James M. Grady
Critic	John J. Donnelly
Editor, *Bureau Chat*	John J. O'Doran

THE MANHATTAN COLLEGE ENGINEERING SOCIETY.

Membership in this Society is limited to students of engineering in the Junior and the Senior classes. Meetings are held bi-weekly, at which papers are read by students and discussed by students and instructors.

President	John J. O'Donnell, '17
Vice-President	Denis C. Quinn, '18
Secretary	James A. Houlihan, '17
Treasurer	Roland J. McAuliffe, '18

MANHATTAN COLLEGE ATHLETIC ASSOCIATION.

President	Francis J. Noonan, '17
Vice-President	Thomas F. Sullivan, '18
Secretary	John M. Kennedy, Coml., '17
Treasurer	Hugh J. Carroll, '17
Manager, Baseball	Arthur J. McConnell, '17
Manager, Basketball	William B. Hubbard, '17
Manager, Track	Joseph A. Capozzi, '17
Manager, Tennis	John J. Keogh, '18

Press Committee: Joseph A. Capozzi, '17; Roland J. McAuliffe, '18; Bernard R. McConville, '20.

Executive Committee: Brother Azarias, Brother Azarias Joseph, Edward A. Hanrahan, '06; Thomas J. McEntegart, '12; Joseph T. Houlihan, '09; Francis J. Noonan, '17.

COLLEGE PUBLICATIONS.

THE MANHATTAN QUARTERLY.

The *Manhattan Quarterly* is a literary magazine published by the students of Manhattan during the months of January, April, July, and October. Its object is to encourage among the students literary composition of a high order of merit, and to serve as a link between former students of Manhattan and their Alma Mater, by keeping them in touch with the leading thought of the College and of the Alumni Society.

STAFF.

Editor-in-Chief—CHARLES S. POWER, '17.

Associate Editors—ARTHUR J. MCCONNELL, '17; DENIS M. QUINN, '18.

Alumni—JOSÉ M. FERRER, M.D., '76.

Exchanges—JAMES T. BRENNAN, '17; JAMES V. O'REILLY, '19.

Current Events—BERNARD J. MCENTEGART, '17.

Athletics—BERNARD R. MCCONVILLE, '20.

Business Managers—JOHN J. O'DONNELL, '17; GEORGE C. SHANNON, '18.

THE NEWS-LETTER.

The *News-Letter* was founded in 1900, mainly thru the energy of Dr. José M. Ferrer, '76, and the generosity of members of the Alumni Society. It is published monthly from October to June. The chief object of the publication is to give College news, and also items of interest concerning graduates of the various departments.

THE MANHATTANITE.

The *Manhattanite* is the Year Book of the undergraduates. It is a literary and artistic review of the Seniors as a class and as individuals. It illustrates the current college year activities, and records with pleasurable pride the anniversaries of the loyal and distinguished graduates of Manhattan.

EDITORIAL STAFF.

Editor-in-Chief—EDWARD T. MCNIERNEY.
Assistant Editor—CHARLES S. POWER.
Art Editor—JOHN M. KELLY.
Advertising Manager—JOSEPH A. CAPOZZI.
Circulating Manager—HUGH J. CARROLL.
Business Manager—LOUIS C. HEILMAN.

REGISTER OF STUDENTS—1916-1917.

ABREU, SIXTO E.	Havana, Cuba.
AUBLE, JOHN J.	New York City.
BADER, ALBERT X.	New York City.
BARON, EMANUEL H.	New Rochelle, N. Y.
BARRETT, WILLIAM E.	Long Island City, N. Y.
BARRY, WALTER G.	New York City.
BECKER, JOSEPH W.	Detroit, Mich.
BLAKE, GEOFFREY M.	New York City.
BLISS, RUSSELL L.	New York City.
BOCK, RAYMOND A.	New York City.
BOLAND, RAYMOND J.	New York City.
BOLAND, WILLIAM J.	New York City.
BORGES, ANTHONY C.	Humacao, Porto Rico.
BOWE, THOMAS J.	New York City.
BRENNAN, JAMES T.	Stamford, Conn.
BRENNAN, GEORGE T.	Stamford, Conn.
BRENNAN, WILLIAM J.	New York City.
BRADY, THOMAS C.	Brooklyn, N. Y.
BROOKS, CHRISTOPHER	New York City.
BROWNE, JAMES D.	New York City.
BRUSCH, JOSEPH A.	Troy, N. Y.
BURNS, JOHN J.	New York City.
BURKE, WILLIAM F.	Buffalo, N. Y.
BURNS, JAMES	Manchester, N. H.
BURNS, ROBERT	New York City.
BURKE, JOSEPH P.	New York City.
BYRNE, MICHAEL J.	New York City.
CALLERY, JAMES	Brooklyn, N. Y.
CANNING, WALTER J.	Brooklyn, N. Y.
CAPOZZI, JOSEPH A.	New York City.
CAROLAN, WILLIAM A.	Brooklyn, N. Y.
CARROLL, HUGH J.	New York City.
CARROLL, FRANCIS X.	New York City.
CASHMAN, JOHN J.	New York City.
CASSIDY, MORTIMER M.	New York City.
CINCOTTI, FRED P.	New York City.

COLEMAN, THOMAS F.	Central Falls, R. I.
COCHRAN, FRANK W.	New York City.
CONLON, TERENCE F.	New York City.
CONKLIN, JOSEPH F.	New York City.
COLLINS, FRANCIS	New York City.
CORBALIS, CHARLES L.	Yonkers, N. Y.
COSTELLO, MAURICE J. V.	New York City.
COTILLO, FRANK I.	New York City.
COTTER, JOHN C.	New York City.
COYLE, FARRELL D.	Lawrence, Mass.
COULTER, JOHN F.	New York City.
CREED, FRANCIS J.	New York City.
CROSBY, CHARLES C.	New York City.
CRUISE, PHILIP J.	New York City.
CRUISE, JOSEPH	New York City.
CUOCO, MARIO J.	Troy, N. Y.
DARDEN, JAMES J.	New York City.
DEGNAN, JAMES J.	New York City.
DEGNAN, FRANK A.	New York City.
DEL BELLO, SYLVESTER W.	Yonkers, N. Y.
DEL BELLO, BERNARD N.	Yonkers, N. Y.
DEVANNY, CHARLES J.	New York City.
DIAZ, JOSE	Havana, Cuba.
DIEDRICH, ARTHUR V.	Detroit, Mich.
DILLON, JOSEPH V.	New York City.
DODD, ARTHUR R.	New York City.
DONNELLY, JOHN J.	New York City.
DOTTERWEICH, JOSEPH H.	Buffalo, N. Y.
DONOHUE, JAMES A.	Yonkers, N. Y.
DOWLING, EDWARD D.	New York City.
DUGGAN, STANISLAUS	New York City.
ECCLES, JOHN B.	Yonkers, N. Y.
ELIAS, ROMAN	New York City.
ENGELMAN, GEORGE	New York City.
ESCOBEDO, JOSE	Havana, Cuba.
ERHARD, ZACHARY	New York City.
FALVEY, LEO T.	Westchester, N. Y.
FENNELLY, LEO C.	Brooklyn, N. Y.
FITZSIMONS, GARRETT J.	New York City.

FLANAGAN, JOHN	New York City.
FOGARTY, DOMINIC	New York City.
FOGARTY, JOHN A.	Yonkers, N. Y.
FONDA, JAMES D.	New York City.
FLOOD, FRANCIS J.	Westchester, N. Y.
FROST, JAMES V.	Brooklyn, N. Y.
FRYER, JOHN F.	River Edge, N. J.
FULLAM, MARTIN A.	New York City.
GALLAGHER, THOMAS J.	Lakeview, N. J.
GALLAGHER, THOMAS J.	New York City.
GARDELLA, LOUIS	New York City.
GARGIULO, DEWEY J.	New York City.
GAROFALO, ANTHONY	New York City.
GARRITY, STEPHEN J.	Limerick, Me.
GEREMIA, DANIEL	New York City.
GIBBONS, EDWARD T.	Providence, R. I.
GILL, EDWARD A.	New York City.
GONDA, WILLIAM L.	Yonkers, N. Y.
GOULD, HERBERT A.	New York City.
GRADY, JAMES M.	Westchester, N. Y.
GRAZIADEI, HUMBERT J.	New York City.
GUZMAN, GUILLERMO	New York City.
HAND, EDWARD J.	New York City.
HANNAN, JOHN P.	New York City.
HARRIS, RAYMOND	New York City.
HAYES, JOHN J.	New York City.
HAYES, GEORGE J.	New York City.
HEILMAN, LOUIS C.	New York City.
HEITEFUSS, OSCAR H.	New York City.
HENNESSY, RICHARD J.	New York City.
HERNANDEZ, ELEUTHERIO E.	Humacao, Porto Rico.
HIGGINS, WILLIAM V.	New York City.
HILDENBRAND, JOHN	New York City.
HIRSCHMAN, JAMES	New York City.
HOLLAND, JOSEPH F.	Newark, N. J.
HOPKINS, FRANCIS R.	New York City.
HOPKINS, JOSEPH W.	New York City.
HOULIHAN, JOHN J.	New York City.
HOULIHAN, JAMES A.	New York City.

HOULIHAN, GERALD A.	New York City.
HOWLETT, PAUL M.	Buffalo, N. Y.
HUBBARD, WILLIAM B.	Danbury, Conn.
HUBNER, CORNELIUS A. F.	Butler, N. J.
JONES, PAUL M.	New York City.
JOYCE, EDWARD J.	Elmhurst, L. I., N. Y.
KEANE, LAWRENCE F.	New York City.
KELEHER, DANIEL J.	New York City.
KELLY, JOHN M.	Yonkers, N. Y.
KELLY, JOHN J.	New York City.
KELLY, THOMAS A.	New York City.
KELLY, WILLIAM J.	New York City.
KELLY, JOSEPH J.	Buffalo, N. Y.
KELLY, HOWARD A.	New York City.
KEOGH, JOHN J.	New York City.
KENNEDY, JOHN M.	Burmont, Pa.
KERR, THOMAS A.	New York City.
KILEY, HAROLD J.	New York City.
LE CLAIR, PHILIP A.	New York City.
LIMA, GUSTAVO M.	Vieques, Porto Rico.
LINDENSTADT, EDMUND J.	New York City.
LOUGHRAN, JOHN C.	New York City.
LYNCH, FRANK J.	New Brighton, N. Y.
LYONS, JAMES V.	Orange, N. J.
McAULIFFE, ROLAND J.	New York City.
McBREEN, THOMAS J.	New Brighton, N. Y.
McBRIDE, PETER F.	New York City.
McCONNELL, ARTHUR J.	New York City.
McCONVILLE, BERNARD R.	New York City.
McDONOUGH, ROBERT	New York City.
McDONNELL, JAMES A.	New York City.
McENTEGART, BERNARD J.	New York City.
McENTEGART, JAMES A.	New York City.
McENTEGART, THADDEUS F.	New York City.
McGEE, RAYMOND A.	New York City.
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McKEE, JAMES	New York City.
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McMAHON, STEPHEN B.	New York City.

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OVALLE, PHILIP	Barranquilla, Columbia.
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QUINN, JOHN J.	New York City.
QUINN, JOHN J.	New York City.
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SEGURA, JOSE E.	Mexico City, Mexico.
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SEXTON, FRANCIS R.	New York City.
SHANNON, GEORGE C.	New York City.
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SMITH, GEORGE A.	Central Islip, N. Y.
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TOWLE, FELIX S.	New York City.
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VANDER NOOT, EMILE A.	Westchester, N. Y.
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WARD, THOMAS J.	New York City.
WHITE, JAMES J.	New York City.
WILKINS, HENRY J.	New York City.
WILLIAMS, EDWARD	New York City.
WILSON, HAROLD A.	New Dorp, N. Y.
WILSON, JOHN F.	New York City.
YUMET, JOSE M.	Aguadilla, Porto Rico.
ZIMMERMAN, AUGUST J.	New York City.
ZIVI, FRANK J.	New York City.
ZURMUHLEN, FRED H.	New Brighton, N. Y.

SIXTY-THIRD - - - ANNUAL

COMMENCEMENT

OF

MANHATTAN COLLEGE

The Right Reverend Patrick J. Hayes, D. D., '88
AUXILIARY BISHOP OF NEW YORK

PRESIDING

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Tuesday, June Twentieth, Nineteen-sixteen

ORDER OF EXERCISES

OVERTURE—"Stradella" - - - - *Flotow*
ORCHESTRA

PHILANTHROPY AND CHARITY, Thomas Jos. O'Connor

VOCAL QUARTET—"Now the Night in Starlight Splendor" *Donizetti*
MANHATTAN ALUMNI QUARTET

THE CHURCH AND PEACE - William Bernard Tigue

SELECTION—"The Blue Paradise" - - *Romberg*
ORCHESTRA

TERCENTENARY THOUGHTS, Edward Bernard O'Connor

CORNET SOLO—"O Promise Me" - - *DeKoven*
ORCHESTRA

THE INDIVIDUAL—PAST AND PRESENT, Thomas James Quinlan

VOCAL QUARTET—"Ave Maria" - - *Mascagni*
MANHATTAN ALUMNI QUARTET

CONFERRING OF DEGREES.

AWARDING OF PRIZES

ADDRESS TO THE GRADUATES

JAMES J. WALSH, M. D., Ph. D., Litt. D.

MARCH—Aida - - - - - - *Verdi*

ORCHESTRA

HONORARY DEGREE OF DOCTOR OF LAWS

REV. WILLIAM B. FARRELL, '87 HON. LUKE D. STAPLETON, ex-'89
HON. JOHN J. FITZGERALD, '91

HONORARY DEGREE OF MASTER OF ARTS

WILLIAM S. BUTLER, ex-'05 DENIS A. MCAULIFFE

HONORARY DEGREE OF MASTER OF SCIENCE

EDMUND S. NUGENT, ex-'99

DEGREE OF MASTER OF ARTS IN COURSE

JOSEPH L. MCGOLDRICK, '12 HUMBERT M. MIRAGLIA, '13

DEGREE OF CIVIL ENGINEER

ROBERT EUGENE DUNN, B.S. '14
JOSEPH ALOYSIUS MURRAY, B.S. '14
CHARLES JOSEPH DALTON, B.S. '15
WILLIAM MELCHOIR HAUCK, B.S. '15

DEGREE OF BACHELOR OF ARTS

EDWARD BERNARD O'CONNOR, *with credit*
THOMAS JOSEPH O'CONNOR, *with credit*
WILLIAM BERNARD TIGUE, *with credit*
ERNEST PAUL COCAGNE
JOSEPH ALOYSIUS CORBALIS
DENNIS FRANCIS HEALEY
WILLIAM ALOYSIUS KELLY
FRANCIS JOSEPH LEO SWEENY

DEGREE OF BACHELOR OF SCIENCE IN CIVIL ENGINEERING

FRANCIS JOHN DOWNING, *with honor*
WILLIAM JOHN DWYER, *with honor*
DANIEL JOSEPH BEGLEY
MICHAEL AUGUSTINE CREGAN
GERALD VINCENT CRUISE
JOHN JOSEPH DUNNE
JAMES ALOYSIUS GREGORY
HENRY STEAD KILLEEN
BENJAMIN JOHN HICKEY
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THOMAS JAMES QUINLAN
JOHN VINCENT JOSEPH TIMONEY

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Next in Merit, THOMAS JOSEPH O'CONNOR
Honorable Mention, THOMAS JAMES QUINLAN
Donor, Manhattan College Alumni Society

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First—John J. Purcell, Cathedral School; second, Patrick J. Gallagher, Holy Trinity School; third, Bernard Ryan, St. Cecilia's School, Brooklyn.

Manhattan College High School

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Right Reverend Monsignor Francis H. Wall, D. D.
PRESIDING

DE LA SALLE HALL

Friday Evening, June Sixteenth, Nineteen-Sixteen

PROGRAM

OVERTURE—"Raymond" - - - - *Thomas*
THE MORAL SPIRIT IN SHAKESPEARE,
Lawrence F. Keane
VOCAL SELECTION—"Serenade" - - *Schubert*
NOCTURNE from "Midsummer Night's Dream" *Mendelssohn*
NATIONAL PREPAREDNESS - - John G. Kearsing
VOCAL SELECTION—"Beautiful Moonlight" - *Glover*
THE CHARACTER OF THE MEXICAN PEOPLE,
Mortimer M. Cassidy
MORCEAU—"Salut d'Amour" - - - *Elgar*
ADDRESS TO THE GRADUATES
THE REV. THOMAS P. PHELAN, A. M., '91
FINALE—"Soldiers' Chorus" - - - *Gounod*

GRADUATES

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MORTIMER MICHAEL CASSIDY
RAFAEL CICERARO CHORNICHALLO
VERNON STUART DILLON
LEO JOSEPH KANE
LAWRENCE FRANCIS KEANE
FRANCIS JOSEPH LOGUE
JOHN CHARLES LOUGHRAN
BERNARD JOSEPH MCCONVILLE
RICARDO VICENTE MIRA
WILLIAM DAVID QUINN
FRANCIS JOSEPH ZIVI

HIGH SCHOOL—COMMERCIAL

Rafael Dorantes, Jr.
William Edward Fisher
John Joseph Horan
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Arthur Aloysius Kelly
James Alfred Nolan, Jr.
Alfred Joseph O'Brien
William Joseph Quinn

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Next in Merit, Bernard J. McConville
Donated by Manhattan College High School

Medal for Elocution

JAMES J. SEXTON

Next in Merit, James A. Donahue
Mortimer M. Cassidy
Donated by a Friend

Brother Charles Memorial Medal for Excellence in the Commercial Department

JAMES G. KEARSING

Next in Merit, William J. Fisher
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Kean Medal for Christian Doctrine in Commercial Department

JOSEPH J. HORAN

Next in Merit, James G. Kearsing
Donated by Rt. Rev. Mgr. John J. Kean, LL.D., '66

Pommerer Medal for Stenography and Typewriting

ALFRED J. O'BRIEN

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JAMES D. FONDA
Next in Merit, FRANCIS A. STANLEY

Prize for Excellence in First Year A

ALBERT J. SICREE
Next in Merit, WILLIAM E. BARRETT

Prize for Excellence in First Year B

STANISLAUS DUGGAN
Next in Merit, ARTHUR R. DODD

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